

New Zealand Women's Employment Patterns: Diversity or Homogeneity?

SARAH HILLCOAT-NALLÉTAMBY*
SANDRA BAXENDINE

Abstract

New Zealand has experienced sustained increases in women's labour force participation since the post-war period. When observed across time, work patterns provide insights to the changing overall lifetime attachment of women to the labour market. Using data from the 1995 sample survey *New Zealand Women: Family, Employment, Education*, we present descriptive findings on the work patterns of women born between 1936 and 1965, and depict these patterns in terms of spells in and out of work. A cohort perspective is taken. We then proceed to summarise the details of these individual work histories using summary measures which can then be correlated with potential explanatory factors. The results show that by the age of 30, successive birth cohorts have experienced: (i) increasing complexities in their work and non-work trajectories; (ii) childbearing continues to depress women's engagement in paid work across time; and (iii) the influence of educational attainment and ethnicity seems to be changing.

New Zealand has experienced sustained increases in women's labour force participation since the post-war period. The census of Populations and Dwellings and Household Labour Force Survey give details of labour force participation rates, but rely on the compilation of cross-sectional data to provide indicators of long-term trends in women's engagement in the labour force. At present, short-run transitions can be measured with data from the Household and Labour Force surveys but only for a period of up to two years, and the forthcoming SOFIE surveys will provide long-run transitions in the future. Hence whilst we know from existing data sources that women's participation in paid employment has increased progressively since the Second World War period, they do not at present provide us with insights into two aspects of women's work: the

* Department of Societies and Cultures, University of Waikato, Private Bag 3105, Hamilton. Email: nalletam@waikato.ac.nz

sequencing of work patterns across the life course, in terms of periods in and out of employment and *how much* of their potential working lives they will spend in employment.

From a policy perspective, the need to monitor these aspects of women's work has become increasingly recognised, for several reasons (Harré-Hindmarsh and Davies 1995; Walby 1991). International research suggests that gendered differences in accumulated work experience is an important explanatory factor of unequal labour market outcomes between men and women in terms of occupational segregation, loss of skills, pay inequities and current labour force status (Blau and Kahn 2000; Dex and McCulloch 1998; Huber and Spitze 1981; Rosenfeld 1980; Stewart and Greenhalgh 1984).

The purpose of this paper is to illustrate the work history patterns of New Zealand women born between 1936 and 1965. More specifically, the paper presents two sets of descriptive analyses of these histories. We draw on graphical representation techniques first developed by Corcoran in the US (Corcoran 1979) and later applied to UK data (Stewart and Greenhalgh 1982) to describe work history patterns in New Zealand in terms of the sequencing and frequency of spells in and out of work. Summary measures of these histories are also presented along with a brief descriptive statistical analysis examining differences in work patterns by educational achievement, childbearing status and ethnicity. Second, by comparing the graphical representations and summary measures across different cohorts of women as they have reached given ages, we are able to look at cohort and life course effects (Main 1988). We therefore examine the work history patterns experienced by age 30 for three groups of birth cohorts, and those experienced between the ages of 30-39 for the older birth cohorts.

Data are from the 1995 sample survey *New Zealand Women: Family, Employment, Education/NZW:FEE* (Johnstone 2001; Marsault *et al.* 1997) which provides a unique source of retrospective, unit-level data on the current and previous work experiences of women aged between 20 and 59 years in 1995. The majority of women interviewed had worked at least once by 1995 (96.2% = 2868; 3.8% = 113 never worked).

Conceptualising Work History Patterns

Drawing on international research which has used retrospective, sample survey data to identify and explain the work history patterns of men and

women (Dex 1984; Elias and Main 1982; Jacobs 1999; Main 1988; Rimmer and Rimmer 1995), we conceptualise work in terms of periods during which women are involved in paid and unpaid activities, and which cumulatively, provide an individual's history of attachment to work across their life course.

In this paper, the concept of work is synonymous to employment, and refers to a self reported status by which survey respondents identified what they perceived to be their *main activity* at a given point in time¹. If this activity was reported as "employed" or "employed without pay", and provided the activity was for a period of at least 3 consecutive months, then it is considered as "work". This definition is not strictly comparable to standard labour force participation rates derived from the census or Household Labour Force survey which include the unemployed in the numerator populations, and which rely on a much shorter reference period within which labour force activity is recorded.²

The concept of *work spell* is central to the development of the work history patterns. Work and non-work spells were obtained from the survey data by following through each individual woman's employment history and collating the various periods of work and non-work into a continuous pattern. Patterns were documented for each woman following the age at which she left school.³ A *non-work spell* includes periods in which women reported either being a homemaker, being unemployed, studying or retired. A *work spell* includes women reporting paid or unpaid employment (full or part time). Any two work spells punctuated by a non-work spell of less than three months were collated to make one continuous work spell⁴. A third group "Other", included women who had never worked for more than a three month period, those who had worked for less than three months and refusals or "don't know" responses. This last group was merged into the *non-work spell* category.

Three concepts are used to describe the nature of these patterns: an *interruption* refers to a break from employment consisting of one non-work spell flanked by two work spells; *continuous* work spells describe patterns for women who have taken up work after school and have continued uninterrupted until the time of interview or a given age; a *delayed entrance spell* (into the workforce) refers to a spell of non-work immediately following the completion of full-time schooling.⁵

The graphical representations of work histories are a useful visual tool, and also provide some evidence of duration of spells, but serve essentially as a descriptive element. For the purpose of extending the analysis further towards explanation, we must summarise these patterns. Summary measures include: number of working, non-working and total spells, the average duration of each of the former spell types and the proportion of potential working life spent in work.

Data Considerations

A key problem encountered when using retrospective data is the risk of inaccurate data collection due to recall problems (Dex and McCulloch 1998; Elder and Johnson 1999; Jacobs 2003). To address this problem, we have compared the proportions of women in the sample who were at work at given ages in the past, to proportions obtained during four census periods (Elias and Main 1982:43). Data were collated as follows: for all survey women aged 59 in 1995, the proportion employed for every year between 1952 (age 16) and 1995 were obtained by tracing back through the retrospective histories. Accuracy of this recall data is then checked by aggregating the resulting proportions of women in employment across cohorts into five year age-groups. For example, the average proportion employed amongst all survey women who were 15-19 in the census year 1975 was then compared with the corresponding census year rate for that age group (Hillcoat-Nallétamby and Baxendine 2005). Comparison of age-specific participation rates obtained from the censuses of 1976, 1981, 1986 and 1991 with the proportions from the survey generally suggest that the recall of past work histories was fairly accurate because they reflect the trends documented at the aggregate level. As mentioned previously, some of the differences may be due to definitional issues related to the reference period during which data were collected. The census for example records employment activities in the reference week prior to the date of census day, unlike the NZW:FEE as outlined above.

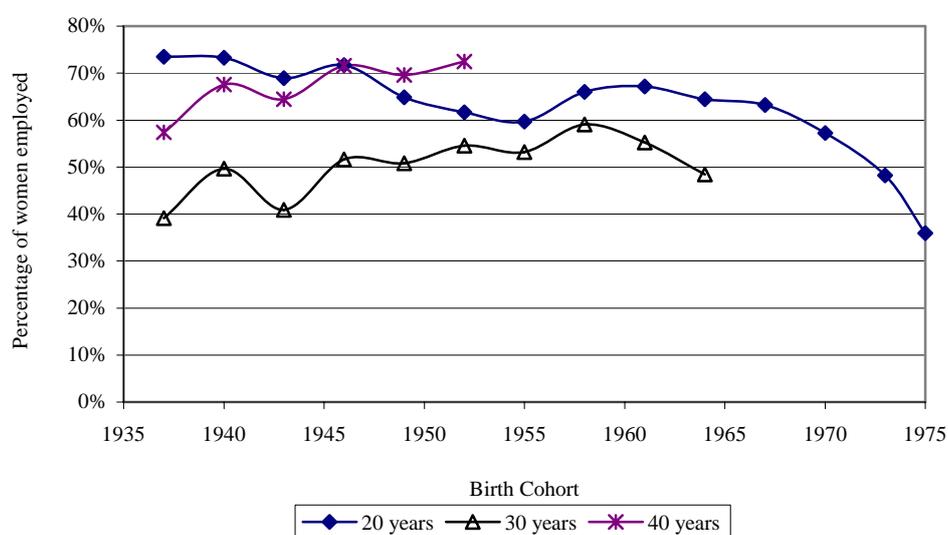
Findings

Women's Increased Involvement in Employment across Time

Despite temporal fluctuations which are probably indicative of both time-specific conditions influencing the supply and demand for labour, as well as

inaccuracies of reporting due to recall, Figure 1 indicates that the proportions of women in employment at age 20 has generally been declining. About three out of four women born between 1936 and 1938 would have been in employment at this age, compared to fewer than four out of ten of their younger counterparts born in the early to mid-1970s. The picture is reversed at older ages, with each successive cohort of women, being more likely to be in employment at age 30 or 40. This analysis therefore affirms what we know, and hence reinforces the validity of our data – that women's participation in paid work has increased for successive birth cohorts, becoming more pronounced at older ages (Davies and Jackson, 1993; Dixon, 1996).

Figure 1: Percentage of women employed at exact ages 20, 30 and 40 by birth cohort,⁶ NZW:FEE

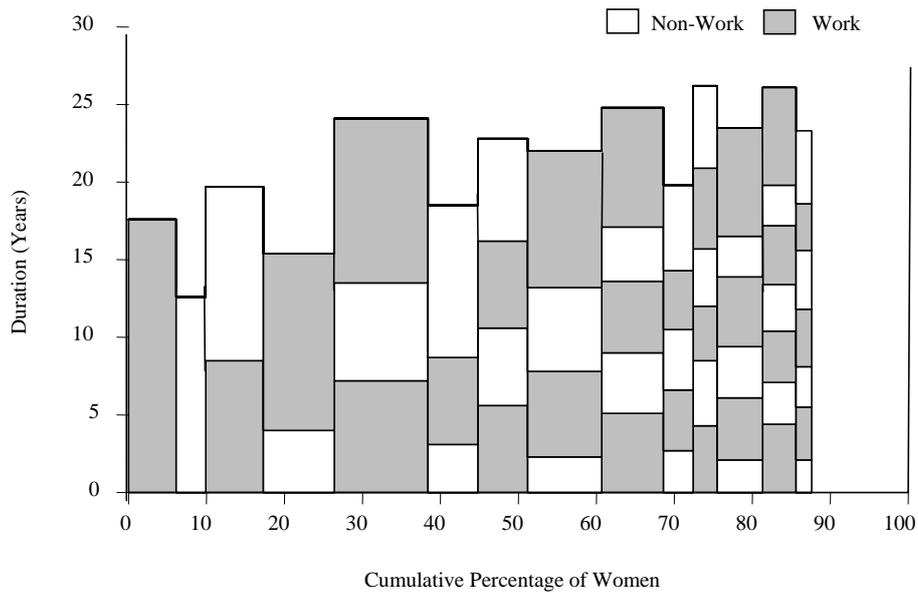


Work History Patterns in the 1990s

All Women

We first describe the broadest of cross-sectional pictures of work histories for *all women* aged 20-59 in 1995 (Figure 2). A striking feature of the graph⁷ is the variety of patterns observed, as about four out of every ten women (39.3 per cent) have experienced a sequence of five or more work and non-work spells.⁸

Figure 2: Average duration of work and non-work spells for all women (aged 20-59) as reported in 1995 (N=2,981)



To the far left of the histogram we see that 10 per cent of women have experienced only one spell, less than half (3.8 per cent) of whom having *never worked*, the remainder having worked *continuously* since leaving school. Reading from left to right, about 16 per cent of women have experienced two spells, with similar proportions having worked and then ceased (“*work/non-work*”), or having *delayed* taking up paid work by having a spell of non-work immediately following the completion of full-time schooling (“*non-work/work*”). Just under one fifth of women (18.4 per cent) have experienced three spells: 12 per cent have worked on leaving school, withdrawn from the labour market and then returned to paid work; their counterparts who have experienced one work spell flanked by two non-work spells (6.4 per cent) have yet to return to paid work, if at all, and have therefore not experienced a completed interruption. For the 16 per cent who have experienced four spells, some have currently left work for a second time (6.3 per cent) and the remainder have returned after a first completed interruption (9.5 per cent), having initially delayed their start in paid work. The more complex patterns consisting of five or more spells appear at the far right side of the histogram.

The patterns are therefore predominantly characterised by complex sequences of five or more spells, with only a small proportion of one spell. In terms of work behaviour, a minority of women has never worked, but only a slightly higher proportion has worked continuously since leaving school. Less than eight per cent have had only one work spell and are yet to return to work. The majority of women therefore (over two thirds) have experienced at least one interruption (or return).

Looking at specific work patterns (reading Figure 2 from left to right), the average duration in the case of a continuous work spell is 17.6 years. For those who have worked and are currently experiencing their first, uncompleted break or *out-spell* from work they have on average, been out of work for over 11 years, a longer period than their initial experience of work which lasted on average, 8.5 years. This suggests that they may have opted to leave work on a permanent basis, after an extended period of initial work activity. This interpretation is somewhat substantiated by the fact that the average duration in years of this incomplete *out-spell*, 11.2 years, is the longest of any of the other non-work spells, barring those who have never worked. The reverse of this particular pattern appears for women who are currently in work, following an initial *delayed entry* of about 4 years. Since engaging in paid work, they have remained active for about 11.5 years.

Women have experienced about four and a half spells (slightly more work than non-work), with an average duration of about six and a half years (again, a higher duration for work than non-work spells). Of all the time they might have spent in paid work since leaving school, about sixty-one per cent have done so.

Variations by Age, Childbearing Status, Education and Ethnicity⁹

Previous research on women's work experience would suggest that the work history patterns thus far described will vary by age, childbearing status, educational experience and ethnicity. We briefly examine the influence of these factors at the bivariate level.

Remembering that these results reflect a cross-sectional perspective, the likelihood of having experienced the more complex histories of 4 or more spells increases with age as we would expect. Generally speaking, the number of working and non-working spells increases with age for those having worked two or more spells (Table 3). For the youngest women,

about one out of 10 have experienced neither type, probably indicating the effect of prolonging education into the early twenties. The majority in this same age group (close to half), have had only one working or non-working spell. In contrast, as would be expected, it is the older women who are the most likely to have experienced four or more work or non-work spells, and their experience of work and non-work is concentrated in patterns of one, two or three spells (see Hillcoat-Nallétamby and Baxendine 2005 for details).

Similarly, average numbers and durations of spells increase with age, and are higher for work than non-work spells, this difference again increasing with age, suggesting that women of all ages spend more of their potential work life in work than out. Interestingly however, the total proportion of life worked remains strikingly consistent at about 60 per cent once women reach their thirties.

For women with at least one child, the impact of childbearing upon their participation is evident (Table 1). Compared to women with no children, those with at least one child are more likely to have worked three or more spells, and are concentrated in the more complex of patterns. There are similar frequency distributions for work and non-work spells. The ability to work continuously when no children are present is undoubtedly a key reason why nearly half of childless women have worked only 1 work spell. The average duration of non-work spells for childless women is only about half that of mothers (1.53 years compared to 2.24 years) and the former have worked more of their potential working life (65 per cent compared to 57 per cent).

Education seems to have no clear impact on the frequency of total spells, although the likelihood of experiencing two or three spells decreases with increasing levels of qualification, and in turn, those with the highest level of qualification are concentrated in the four and five plus spells. The latter pattern also holds true for both work and non-work spell distributions. Very few women with higher education have never worked, and they have a higher mean number of total, work and non-work spells and shorter duration of non-work spells (average duration of 0.62 years compared to 0.48 for those with none). This suggests that high educational achievement enhances attachment to work through more complex patterns of entry and exit.

Table 1: Frequency distribution of total, work and non-work spells by childbearing status, all women, 1995 (%)

Number of spells	<u>Total</u>			<u>Work</u>			<u>Non-work</u>		
	No child	≥ 1	<u>Total</u>	No child	≥ 1	<u>Total</u>	No child	≥ 1	<u>Total</u>
0	-	-	-	7.2	3.0	3.8	14.8	4.1	6.1
1	21.9	7.1	9.9	48.6	24.4	29.1	45.7	29.1	32.3
2	29.3	13.5	16.5	23.9	33.6	31.7	22.3	32.0	30.1
3	13.9	19.5	18.4	12.1	20.3	18.8	10.7	18.5	17.0
4	13.0	16.5	15.8	5.3	10.9	9.8	4.6	9.7	8.8
5+	21.9	43.4	39.3	3.0	7.8	6.9	1.9	6.6	5.7
Total %	100	100	100	100	100	100	100	100	100
N =	570	2410	2980	570	2411	2981	569	2411	2980

Compared to Maori, Non-Maori are more likely to have experienced complex patterns of five or more spells (Table 2), have higher proportions in work and non-work spells of 3 or more periods, and lower proportions who have never worked. Non-Maori have higher mean numbers and durations of total, work and non-work spells, whilst the mean duration of non-work spells for Maori is higher. Maori have spent about 50 per cent of their potential working life in work compared to 60 per cent for Non-Maori.

Table 2: Frequency distribution of total, work and non-work spells by ethnicity, all women, 1995 (%)

Number of spells	<u>Total</u>			<u>Work</u>			<u>Non-work</u>		
	Maori	Non-Maori	<u>Total</u>	Maori	Non-Maori	<u>Total</u>	Maori	Non-Maori	<u>Total</u>
0	-	-	-	6.5	3.4	4.0	4.0	6.4	6.0
1	10.5	9.9	10.0	34.5	28.3	29.4	37.2	31.6	32.6
2	20.0	16.0	16.7	31.2	31.8	31.7	32.6	29.8	30.3
3	21.3	18.0	18.6	16.4	19.1	18.6	16.4	17.1	17.0
4	16.4	15.8	15.9	7.9	10.1	9.7	6.9	9.0	8.6
5+	31.8	40.3	38.9	3.6	7.4	6.7	3.0	6.1	5.5
Total %	100	100	100	100	100	100	100	100	100
N =	506	2475	2980	506	2475	2981	506	2475	2980

In sum, at the bivariate level, all four factors influence the sequencing, number and length of spells. As would be expected, increasing age is associated with more varied sequencing of patterns and longer durations in

and out of work. Childbearing reduces the time mothers can potentially spend in work, makes their non-work spells lengthy and creates more varied patterns, suggestive of more movements in and out of work. Being highly qualified is a facilitating factor in increasing the number and length of work spells and in reducing time spent out of work, and having never completed an educational qualification has a depressing effect upon potential time that might have been spent working. For Maori, their work histories are less complex in terms of pattern sequences, numbers and durations of spells and they will experience longer non-work periods and less of their potential life in work.

At time of interview in 1995, the vast majority of women will have experienced paid work at least once and will have developed complex work histories. The patterns observed thus far suggest that they have a firm, but far from continuous involvement in employment, with significant variation in the types of patterns of engagement depending upon current age, educational achievement, childbearing status and ethnicity. Behind the well-known bi-modal curve which is so often used to characterise women's involvement in the labour market lie complex patterns of entry, exit and re-entry.

Work History Patterns by Age 30: A Cohort Perspective

This initial description of work history patterns masks the effects of life cycle stage and changes across time. By examining work patterns for women of different birth cohorts as they reach a given age, we are able to distinguish more readily, whether there have been any significant changes across successive generations in terms of engagement in paid work. Figures 4-6 represent the work history experiences for three cohorts of women by the time they had reached age 30, and who in 1995 were aged between 30 and 39, 40 and 49 and 50 to 59 years. Patterns are compared across the three groups at age 30. When the data are presented in this way, we have an insight into both cohort change and life cycle influences.

Figure 3: Work and non-work spell patterns for women at age 30, birth cohorts 1946-55 aged 30-39 years in 1995 (N = 838)

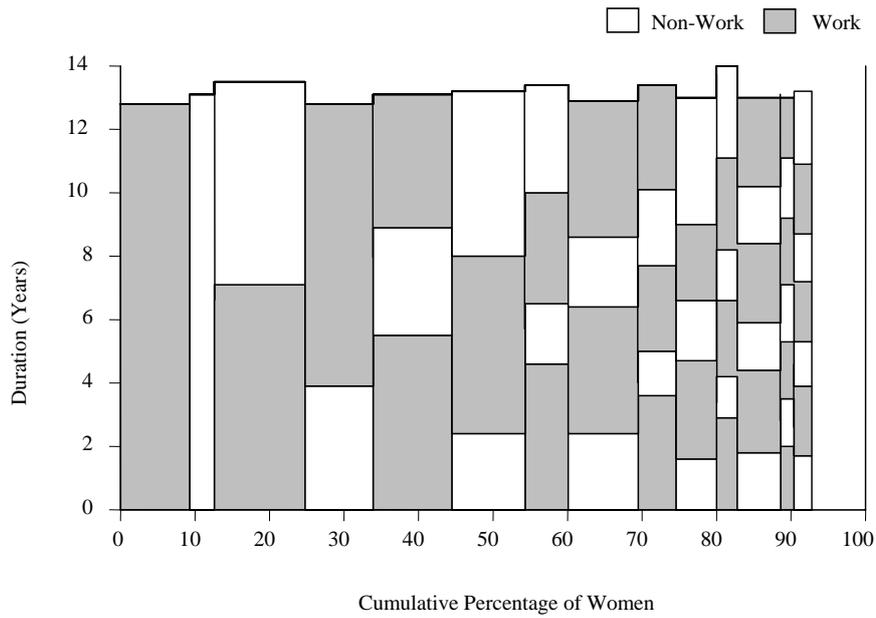


Figure 4: Work and non-work spell patterns for women at age 30, birth cohorts 1946-55 aged 40-49 years in 1995 (N = 838)

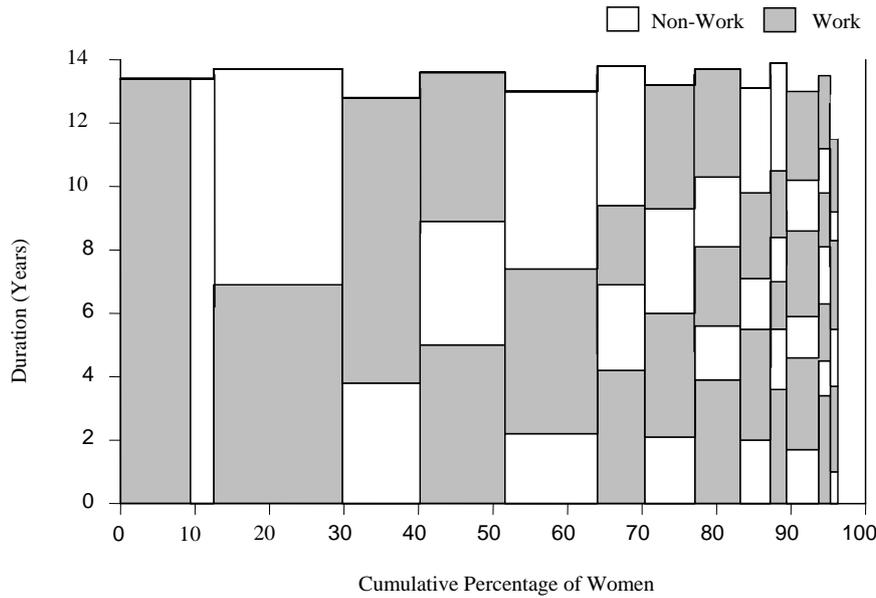
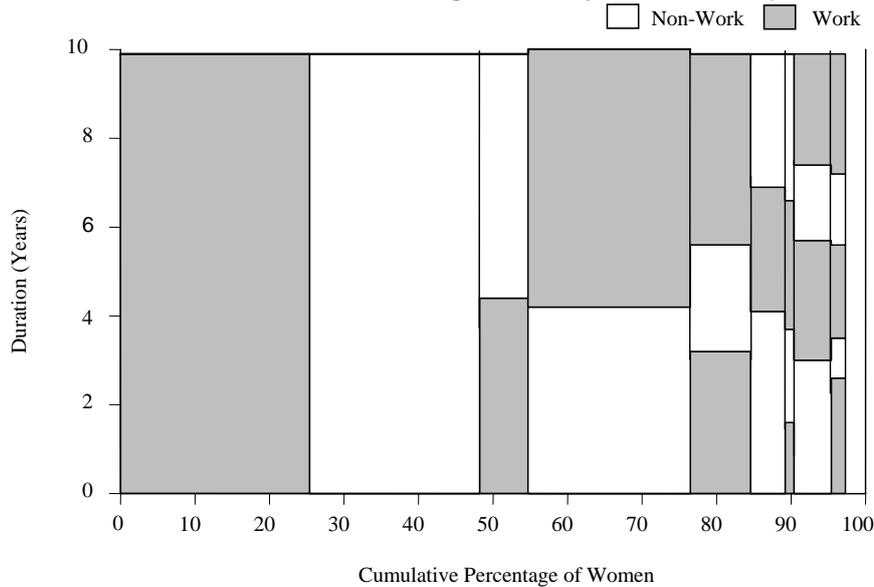


Figure 5: Work and non-work spell patterns for women at age 30, birth cohorts 1946-55 aged 50-59 years in 1995 (N = 838)



First, and irrespective of birth cohort, by age 30 roughly equal proportions of women (about one quarter in each case), had experienced work patterns of two, three or five spells, the remainder similarly divided between patterns of one and four spells. As expected, this represents a markedly different distribution of spell frequency when compared with all women in 1995 where the majority had lived five or more spells. Even if we consider this period of the life course as one of initial family formation, very few women by age 30 had not worked: of the 12 per cent who had experienced only one spell, for the majority, this had been a work spell.

Comparing the birth cohorts (Figures 3-5), there are three noticeable changes in terms of total spells worked by age 30. First, there has been only a slight increase in the proportions of women who have experienced one spell, either of continuous work or no work. In each cohort group, they represent about nine per cent and three per cent respectively of all work patterns experienced by women. Second, moving from older to younger cohort groups, work histories become increasingly punctuated by a sequence of entries and exits. For the youngest women close to a third (30.6 per cent) had already experienced patterns of at least five consecutive work and non work spells, compared to only about one seventh (14.3 per cent) of the oldest cohorts. These differences are explained in part by the greater proportions

of older women (60.1 per cent) who had experienced work patterns of two or three spells respectively, compared to far fewer amongst the youngest cohorts (41.7 per cent).

The third noticeable change is the decrease in the share of work patterns of one work phase followed by no work. Nearly one quarter of the oldest cohorts (23.6 per cent) had experienced this pattern by the time they were thirty (Figure 5), compared to only 12 per cent of the youngest groups (Figure 4). These findings, which also correspond to British data from the 1980 Women and Employment Survey (Main 1988) probably reflect the declining influence of social and legal expectations to withdraw from employment once married and the impact that the Second World War period had on the supply of women to the labour force (Davies and Jackson 1993).

These changes are reflected in an increasing average number of total, work and non-work spells experienced by age 30, and as a result, a decrease in the mean length of these spells for each successive birth cohort group. Whilst it is the youngest birth cohorts who have the most varied patterns, there is also an indication that they were likely to have spent more of their potential working life by age 30 actually in paid employment. They were probably also returning to work more quickly than their older counterparts, as is suggested by the lower average duration of non-work spells.

In sum, the overall changes indicate that with each successive birth cohort group comes a greater fragmentation of work patterns, but with this, a stronger attachment to paid employment by younger women who spend less time away from work.

Variations by Childbearing Status, Education and Ethnicity

As with the cross-sectional patterns examined previously, we would expect that the patterns identified for the three birth cohorts by age 30 will vary depending upon individual level factors of childbearing status, educational achievement and ethnicity.

By age 30, irrespective of birth cohort, childless women are about twice as likely to have experienced only one spell and are significantly less likely to have experienced three spells (Table 3). Overall the likelihood of experiencing more complex patterns increases across the birth cohorts regardless of childbearing status, but childless women amongst the youngest cohorts will be less likely to have had five or more spells.

Table 3: Frequency distribution of total spells experienced by age 30 for birth cohorts by childbearing status, women aged 30-59 in 1995 (%)

Number of spells	1956-65			1946-55			1936-45		
	None	≤1	Total	None	≤1	Total	None	≤1	Total
1	20.7	9.6	12.6	21.9	9.6	12.5	20.5	9.4	11.2
2	20.7	21.6	21.3	27.6	27.9	27.8	30.8	30.5	30.6
3	15.5	22.3	20.5	16.2	25.9	23.7	16.7	32.3	29.7
4	15.1	15.2	15.2	10.2	13.9	13.1	15.4	13.9	14.1
5+	27.9	31.3	30.4	23.5	22.7	22.9	16.7	13.9	14.3
Total	100	100	100	100	100	100	100	100	100
N =	251	686	937	196	638	834	78	403	481

The effect of educational achievement on the number of spells experienced by age 30 has changed across successive birth cohorts. By age 30, women with higher education were the most likely to have worked complex patterns, but this is the least pronounced amongst the oldest cohorts. For the oldest group, having a secondary level qualification reduced the likelihood of experiencing only one spell, and those with no qualification were the least likely to experience the more complex spells. Amongst the youngest cohorts, one quarter with no educational qualification were likely to have experienced more complex patterns, a much higher proportion than unqualified women in the other two birth cohorts. The effect of not having obtained any educational qualification by age 30 is to concentrate 30 per cent or more women in each birth cohort in the two spells pattern, and this holds true for secondary level qualifications but only for the two older birth cohort groups. It therefore appears that the effect of educational achievement on work patterns experienced by age 30 has changed more significantly amongst the youngest of women.

It appears that in the past, Maori women would have been more concentrated in the one or two spell patterns, and although not statistically significant, the distribution for the youngest group suggests ethnic differences are attenuated (Table 4). When compared to the frequencies for the total sample of women in 1995 which is statistically significant (Table 3) this distribution is somewhat similar with the exception of pronounced ethnic differences for the more complex spells.

Table 4: Frequency distribution of total spells experienced by age 30 by birth cohort and ethnicity, women aged 30-59 in 1995 (%)

Number of spells	1956-65			1946-55			1936-45		
	Maori	Non-Maori	Total	Maori	Non-Maori	Total	Maori	Non-Maori	Total
1	10.6	12.9	12.5	20.2	11.9	12.8	18.2	10.8	11.7
2	20.6	21.3	21.2	29.8	27.5	27.8	41.8	29.7	31.1
3	22.4	20.3	20.7	19.0	24.1	23.6	20.0	30.5	29.2
4	14.7	15.2	15.1	11.9	13.3	13.1	10.9	14.4	14.0
5+	31.8	30.3	30.6	19.0	23.2	22.7	9.1	14.6	14.0
Total	100	100	100	100	100	100	100	100	100
N =	170	769	939	84	730	814	55	417	472

In sum, despite the passage of time, childbearing continues to influence the relative continuity of mothers' as opposed to childless women's work patterns by the time they reached 30. Whilst higher educational achievements are clearly associated with more work entries and exits, an increase in these types of patterns in the youngest cohorts is also apparent. Maori women appear to maintain a weaker attachment to work with each successive birth cohort inasmuch as the time they have spent out of work on average remains higher than for Non-Maori.

Cohort Experience During Later Stages of the Life Course

If we consider the work pattern experiences of the two oldest cohorts when they were aged between 30 and 39, and then place them adjacent to their histories lived until age 30, we begin to develop a visual picture of a life course perspective to their trajectories. As the bivariate relationships observed between birth cohorts and number of spells is not statistically significant, we cannot comment with any great accuracy on the patterns we have observed, so limit our discussion to a brief description of the histogram representations and frequency distributions.

First, from a cohort perspective there is an indication that the frequency of patterns of one continuous work spell have increased (from 25 per cent to 30 per cent), whilst continuous non work periods decline (from 23 per cent to 13 per cent) (Figures 6 and 7). Second, there appears to be a slight increase (from five per cent to seven per cent) in the proportions of women who have experienced five or more spells. This reflects the tendency

towards increasingly complex work patterns across cohorts by age 30 which we noted earlier.

Figure 6: Distribution of work and non-work spell patterns for women between ages 30-39, aged 40-49 years in 1995 (N=835)

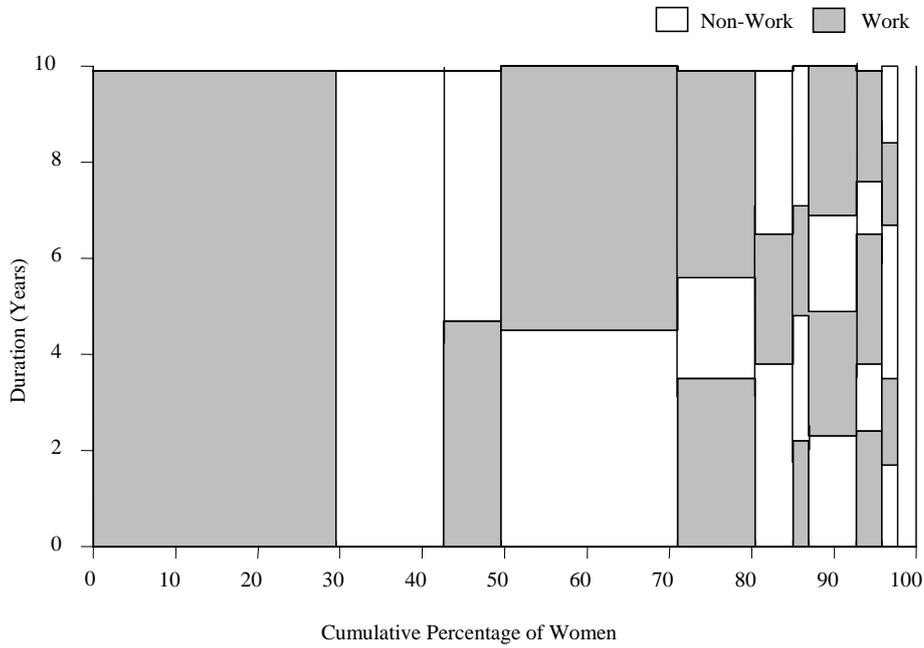
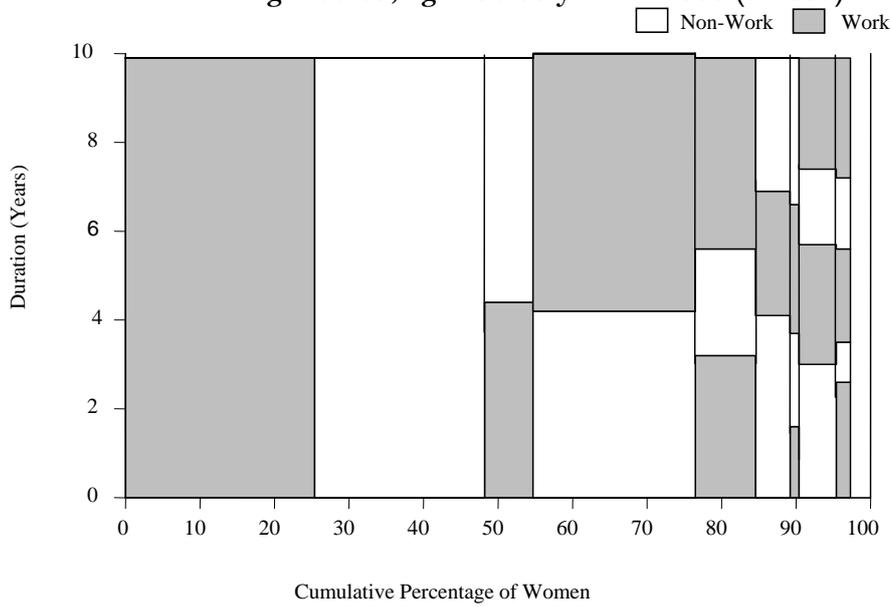


Figure 7: Distribution of work and non-work spell patterns for women between ages 30-39, aged 50-59 years in 1995 (N=835)



The summary work history measures show similar pattern changes to those found for the earlier period of the life course: the greater diversity of patterns displayed by the women born between 1946-55 by the time they had reached 30 continues through into the later phase of their life course with, on average more total and non-work spells than those born between 1936-45. Again, this is reflected in a decrease in the mean length of spells. The main difference compared to the earlier phase of the life course is that the younger cohorts born between 1946-55 appear to have spent less of their potential working life actually in work between the ages of 30-39 than the older group.

Moving away from the focus on cohort changes to life course patterns, if we consider the histograms as representing a continuum of work pattern histories experienced by age 40 (considering Figures 4, 5, 6, and 7 together), we see that the latter stage of the life course clearly seems to provide greater continuity in work patterns. The increase in the proportion of single spells of work during the 30-39 year period (from 9.4 per cent before age 30 to 29.6 per cent for the 1946-55 birth cohorts and 8.5 per cent to 25.4 per cent for the 1936-45 groups) suggests the decreasing need to move in and out of work because of childcare responsibilities. This is mirrored in the progressive decline of the importance of complex sequences of five or more non work and work spells once women are over 30 (from 22.9 per cent before age 30 to 7.4 per cent between 30-39 for the 1946-55 birth cohorts and from 14.4 per cent to 4.6 per cent for the 1936-45 groups).

Conclusion

Whilst we know from aggregate data sources of the census and specialised labour force surveys in New Zealand that women's involvement in paid work has increased over the past decades, by analyzing work histories and taking a cohort perspective, it becomes possible both to trace the sequencing of their work and non-work experiences and to monitor changing patterns across time. Taking a cross-sectional picture, which obviously confounds effects of age and childbearing status, the NZW:FEE data indicate that very few New Zealand women aged between 20 and 59 in 1995 had never been in paid work, only a small proportion had worked continuously since leaving school and the majority had switched at least five times between work and non-work states. Once we control for age and cohort, we see that by the age of 30, successive birth cohorts have experienced increasing complexities in

their work and non-work trajectories. This suggests a progressive shift towards greater attachment to work, although a greater variety in the sequencing of patterns is not necessarily consistent with more time actually spent in paid work over the potential working life available to women. The influence of childbearing continues to depress women's engagement in paid work across time, particularly in the early phase of the life course prior to age 30, but the influence of educational attainment and ethnicity seem to be changing. The correlates of these patterns and their relationship with women's current labour force status, occupational mobility, earnings and savings capacities now remain to be explored.

Notes

This paper was initially prepared during a study leave period hosted at the Institut National d'Etudes Démographiques, Paris in 2001 and as a working paper presented at the Sociological Association of Aotearoa New Zealand Conference, "Social Science in the 21st Century: Challenges to Theory/Policy/Practice", University of Canterbury, December 2002.

- 1 This meant that a woman who was actually involved in home work whilst also being engaged in a few hours paid employment might report the former as her main activity. She would consequently have been classified as "not in the labour force".
- 2 This definition also differs from that of the NZ Census or HLFS in which a person working one hour or more per week is in the labour force.
- 3 For women who started work under the age of 14, their age was imputed up to 14.
- 4 If a respondent reported being "employed" between jobs, but for a period of less than three months, this was not considered a job per se; it was assumed that any gap of less than three months was equivalent to a continuous employment spell. In work histories however, the number of jobs was counted.
- 5 Excludes women who have never worked.
- 6 Points on graph represent average for 3 year single birth cohorts. Due to small cell sizes for single ages, data have been aggregated into three year birth cohort groupings and smoothed. For example, the points plotted are for each third group (eg. Figure 1: the first set of points to the far left of the figure show the proportions of women employed at ages 20, 30 and 40 respectively for those born between 1936 and 1938).
- 7 Data are presented as histograms representing the sequencing of work and non-work spells reported by women. For each histogram, the column width represents the relative frequency of a given work pattern among all women in a

given age group. The vertical axes represents the average duration in number of years spent in each work and non-work spell. The graphs are read from left to right. The columns on the extreme right which are not shaded represent complex or rare work patterns. In reading the graphical representations it must be remembered that some cell sizes are very small, which can lead to considerable variation around the average durations represented.

- 8 For details of frequencies see Hillcoat-Nallétamby and Baxendine (2005).
- 9 Where cell sizes are too small to enable meaningful descriptions, categories for variables of total number of living children, current marital status and educational achievement have been collapsed in view of analysis by cohort.

References

- Blau, F.D. and Kahn, L.M. (2000) "Gender Differences in Pay". *Journal of Economic Perspectives* 14(4):75-99.
- Corcoran, M.E. (1979) "Work Experience, Labor Force Withdrawals and Women's Wages: Empirical Results using the 1976 Panel of Income Dynamics". In Lloyd, C.B., Andrews, E.S. and Gilroy, C.L. (eds.), *Women in the Labor Market*, New York: Columbia University Press.
- Davies, L. and Jackson, L. (1993) *Women's Labour Force Participation in New Zealand: The Past 100 Years*. Wellington: Social Policy Agency.
- Dex, S. (1984) "Women's Work Histories: An Analysis of the Women and Employment Survey". *Employment Department Research Paper*, 46.
- Dex, S. and McCulloch, A. (1998) "The Reliability of Retrospective Unemployment History Data". *Work, Employment and Society* 12(3):497-510.
- Dixon, S. (1996) *Labour Force Participation over the Last Ten Years*, Wellington: Department of Labour.
- Elder, S. and Johnson, L. J. (1999) "Sex-Specific Labour Market Indicators: What they Show". *International Labour Review* 138(4):447-463.
- Elias, P. and Main, B. (1982) *Women's Working Lives: Evidence from the National Training Survey*. Warwick: University of Warwick.
- Harré-Hindmarsh, J. and Davies, L. (1995) *Adults' Learning Pathways: A Pilot Study in the Wellington Region*, Wellington: He Parekereke, Faculty of Education, Victoria University of Wellington.
- Hillcoat-Nalletamby, S. and Baxendine, S. (2005) "The 'Ins and Outs' of Work - Diversity or Homogeneity in New Zealand Women's Employment Patterns?". *Population Studies Centre Discussion Paper No. 50*, Hamilton: University of Waikato.
- Huber, J. and Spitze, G. (1981) "Wives' Employment, Household Behaviour, and Sex-Role Attitudes". *Social Forces* 60:150-169.
- Jacobs, S. (1999) "Trends in Women's Career Patterns and in Gender Occupational Mobility in Britain". *Gender, Work and Organization* 6(1):32-46.
- Jacobs, S.C. (2003) "Reliability and Recall of Unemployment Events Using Retrospective Data". *Work, Employment and Society* 16(3):537 - 548.
- Johnstone, K., Baxendine, S., Dharmalingam, A., Hillcoat-Nallétamby, S., Pool, I. and Paki Paki, N. (2001) *New Zealand. Fertility and Family Surveys in Countries of the ECE Region, Standard Country Report*. Geneva: United Nations.

- Main, B.G.M. (1988) "The Lifetime Attachment of Women to the Labour Market". In Hunt, A. (ed.) *Women and Paid Work. Issues of Equality*, London: Macmillan Press.
- Marsault, A., Pool, I., Dharmalingam, A., Hillcoat-Nallétamby, S., Johnstone, K., and Smith, C. (1997) *Technical and Methodological Report*, Hamilton: The University of Waikato, Population Studies Centre.
- Rimmer, R. and Rimmer, S. (1995) *More Brilliant Careers*, Canberra: Australian Government Publishing Service.
- Rosenfeld, R.A. (1980) "Race and Sex Differences in Career Dynamics". *American Sociological Review* 45:583-609.
- Stewart, M. and Greenhalgh, C.A. (1984) "Work History Patterns and Occupational Attainment of Women". *Economic Journal* 94(375):493-519.
- Stewart, M.B. and Greenhalgh, C.A. (1982) "Work History Patterns and the Occupational Attainment of Women". *Warwick Economic Research Papers*, 212.
- Walby, S. (1991) "Labour Markets and Industrial Structures in Women's Working Lives". In Dex, S. (ed.) *Life and Work History Analyses: Qualitative and Quantitative Developments. Sociological Review Monograph 37*, London: Routledge.