

Working-age life-courses in Finland: A comparison of the cohorts born 1945–51 and 1961–67

Kathrin Komp-Leukkunen

Abstract

Life-courses are of central interest in the social sciences, describing how our lives progress from the cradle to the grave. This article studies working-age life-courses in Finland, considering how workforce participation, educational participation, childbearing patterns, and health trajectories develop during the ages 15 to 64. Moreover, it investigates cohort and gender differences in these life-courses. Multichannel sequence analyses and cluster analyses are carried out with life-history data from the Finnish NoWork dataset. Findings show that most life-courses combine workforce participation with raising children during working age, with patterns of non-employment or working only being less common. Gender differences decreased across cohorts, mainly due to increasing female labour force participation, and the number of childless individuals also increased. These findings raise concerns about a possible upcoming shortage in informal care provided to older people. In theoretical terms, the findings highlight that life-courses reflect the social-democratic welfare regime and that they become increasingly heterogeneous.

Keywords: cohorts, life-course, gender, Finland, work-life balance

Introduction

Life-courses are of central interest to researchers and policymakers. They describe how our lives progress from the cradle to the grave, indicating what we do and which experiences shape us (Mayer, 2009; Settersten & Mayer, 1997). Researchers study life-courses to portray developments over time, for example career progressions or how people time their fertility decisions (Huinink & Kohli, 2014; McMunn et al., 2015). They also study life-courses as reflections of society, showing for example how the introduction of pension schemes institutionalised a phase of old age (Kohli, 2007). Policymakers are interested in life-courses, because they can use them to plan and evaluate policy reforms (Morel, Palier, & Palme, 2012). This article explores life-courses in Finland.

Finland did not participate in the recent advancement in life-course research. European life-course research took a considerable step forward when the 2009 life-history interviews of the Survey of Health, Ageing and Retirement in Europe became available (Schröder, 2011). These life-history interviews collected information on the entire lives of older individuals, describing their complete work biographies, family histories, and health developments, among other things (Börsch-Supan, Brandt, Hank, & Schröder, 2011; Schröder, 2011). As a result, comprehensive analyses of long-term developments became viable, studying, for example, the influence of childhood living conditions on health in old age (Nurius, Fleming, & Brindle,

Komp-Leukkunen (University of Helsinki). Corresponding author's e-mail: kathrin.komp@helsinki.fi.
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2017) and efforts to strike a work-life balance throughout one's entire middle-age (McMunn et al., 2015). The scope of these analyses exceeds the one that Finnish register data allows for in terms of time horizon and level of detail (see e.g. Raab, Fasang, Karhula, & Erola, 2014; Sirniö, Kauppinen, & Martikainen, 2016, 2017). Because Finland did not participate in the Survey of Health, Ageing and Retirement at that time, it lacks comparable long-term studies. The present article helps to close this gap.

This article analyses Finnish life-courses during working age. The working age denotes those life years when individuals are legally allowed to work for pay and not yet eligible for pensions, which is typically equated to the ages of 15 to 64 years in modern Western societies (Figaro, Matsaganis, & Sutherland, 2013; Gjerdingen, McGovern, Bekker, Lundberg, & Willemsen, 2001; Mandal, Batina, & Chen, 2018). The focus on the working age captures those life years when individuals try to find their way in the labour market and balance it with family life, which leads to heterogeneity in life-courses (Bruckner & Mayer, 2005; McMunn et al., 2015). The analyses are carried out using the NoWork dataset. This dataset used an excerpt from the 2009 life-history questionnaire of the Survey of Health, Ageing and Retirement in Europe, which was translated into Finnish and fielded in 2016 and 2017 (Honkanen, 2017; Niemi, 2017).

The research questions are: (1) What structure do Finnish working-age life-courses have? This question will be answered studying the cohort born 1945–51, which belongs to the baby boom generation. This cohort recently lived past the working age, thereby showing us a current picture of complete working-age life-courses. (2) Which cohort differences exist in working-age life-courses? The cohorts compared are the baby boomers and the cohort born 1961–67, which belongs to generation X. The cohort born 1961–67 recently surpassed age 50, which is when early retirement starts to occur. These cohorts' working-age life-courses until age 50 are compared, exploring the phase with the highest labour market participation rates. The cohort comparison reveals a possible de-standardisation during these ages, meaning increasing diversity in life-course patterns. Such a possible trend has recently been discussed for Western life-courses (Bruckner & Mayer, 2005; Kohli, 2007). And (3) which gender differences exist in working-age life-courses? Life-courses typically have gender-specific structures (Macmillan, 2005). However, Finland has a comparatively high level of gender equality in the labour market (Esping-Andersen, 1990; Ronsén & Sundström, 2002). This fact raises the question, to what degree do gender differences in working-age life-courses exist?

Life-courses in Finland

Finland belongs to the social-democratic welfare regime, which is characterised by well-developed social services, high labour market participation rates and small social inequalities (Anttonen & Sipilä, 1996; Esping-Andersen, 1990; Lahelma, Arber, Martikainen, Rahkonen, & Silventoinen, 2001; Mayer, 2005). Previous life-course studies confirmed that these characteristics also apply to Finland, showing comparatively small social inequalities and gender differences in, for example, family formation (Jalovaara & Fasang, 2015; Raab, Fasang, Karhula, & Erola, 2014) and the work-life balance in early adulthood (Sirniö, Kauppinen, & Martikainen, 2017). Because of these previous findings, the first hypothesis is: The majority of working age is spent on paid work. The second hypothesis is that there are only few working-age life-courses with alternative structures.

The older cohort in this study was born beginning in 1945, meaning they belong to the baby boom generation. They were born right after the Finnish Continuation War against the Soviet Union and the Lapland War against Germany had ended. The younger cohort was born beginning 15 years later, meaning they belong to generation X. This second cohort was born when Finland had already recovered from the immediate aftermath of the wars and was undergoing fundamental social change (Kuoppamäki, Wilska, & Taipale, 2016). After the wars, a process of urbanisation coincided with a quick-moving decline of agriculture. Three out of four baby boomers were born in rural areas; until the 1960s, Finland was still the most agrarian Western European country (Antikainen & Kauppila, 2002; Karisto, 2007). However, the share of

people employed in agriculture and forestry declined markedly from about 40 per cent in 1950 to less than 10 per cent in 1980 (Antikainen & Kauppila, 2002). At the same time, Finland moved from an agricultural society almost directly into a post-industrial service society (Karisto, 2007). An increase in welfare state provisions and an educational expansion followed (Antikainen & Kauppila, 2002). During the early 1990s and late 2000s, Finland experienced economic recessions that influenced the work biographies of both the baby boomers and generation X (Karhula, Lehti, & Erola, 2017; Kuoppamäki et al., 2016). Figure 1 shows how old both cohorts were at the time of these historical events.

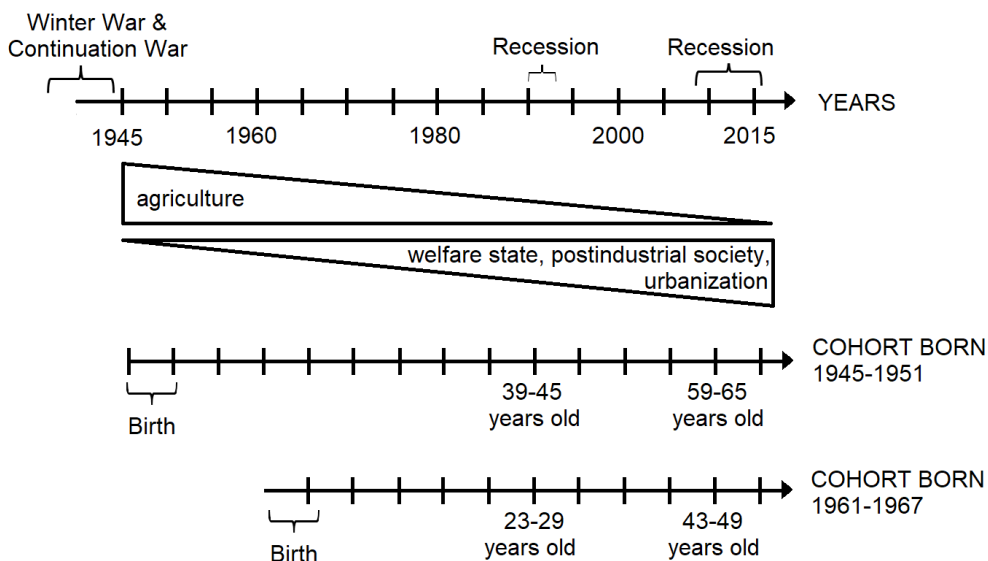


Figure 1. The age of the cohorts born 1945–51 and 1961–67 during historical events.

Social change has consequences for life-courses. Agricultural work is driven by the constant demands of farming, which allows people working in this sector few options for inactivity. As a result, these individuals often start working at an early age and continue working until a late age (Jacobs & Rein, 1993; Kohli, 1987). The shift to an industrial and post-industrial society, combined with the rise of welfare policies, introduced options for a later workforce entry, earlier retirement, and for the existence of unemployment and non-employment spells. Consequently, the third hypothesis is that more members of the older cohort spent their working-age life-courses on paid work. The fourth hypothesis is that interrupted working lives are more common within the younger cohort.

The economic crises increased unemployment rates among youths and older workers especially. The baby boomers were in the middle of their working age during the 1990s recession, and generation X (cohort 1961–67) was in the middle of their working age during the recession of the 1990s and of 2008. As a result, they were less affected than individuals of other ages. However, the baby boomers were in the end of their working age during the 2008 recession, and some of those who became unemployed decided to retire early (Aaberge et al., 2000; Börsch-Supan, Brandt, Litwin, & Weber, 2013; Hytti, 2004; Jonung, Kiander, & Vartia, 2009). This development weakened the labour market attachment of the older cohort during the final part of their working age. As a result, the cohort-difference in workforce participation during these ages may be smaller than during younger ages. However, this hypothesis cannot yet be tested, because the younger cohort did not yet experience the final years of working age.

The social change also affected gender differences in working-age life-courses. The emergence of industrial and post-industrial production made it harder for women to combine work with raising chil-

dren. Like other Western countries, Finland saw declining fertility rates in reaction to this development (Kirk, 1996; Lee, 2003; Lesthaeghe, 2010). However, the decline was comparatively small, mainly due to the expanding Finnish welfare state (Ronsen, 2004). This welfare state allowed women to combine childcare with paid work more easily than in many other countries (Anttonen & Sipilä, 1996; Lahelma et al., 2001; Cooke, 2016). A crucial development was the introduction of the cash-for-care scheme in 1985. This scheme allows parents of children under age three to choose between a guaranteed childcare place and a homecare allowance (Sipilä & Korpinen, 1998). Women who choose a childcare place can usually keep working full-time, making part-time work a rare phenomenon, even among working mothers (Ronsen & Sundström, 2002). However, women in low-income households often choose the cash benefit option and provide childcare themselves (Eydal & Rostgaard, 2011). The introduction of this scheme institutionalised gender differences in Finnish working-age life-courses, although at a lower level than in many other countries. The baby boomers were already in the latter part of their childbearing years when this scheme was introduced, but the younger cohort was just in the beginning of their childbearing years at that time. Consequently, this scheme has a stronger influence on the life-course of the younger cohort. Therefore, the fifth hypothesis is: Women of the younger cohort are more likely to have interrupted working careers when their children are young.

Material and methods

Data

Data stem from the NoWork dataset. This dataset contains life-history data on the working careers, activities, family situations, and socio-demographic characteristics of older Finns. It is harmonised with the 2009 life-history data of the Survey of Health, Ageing and Retirement in Europe (SHARE), because the NoWork questionnaire is an excerpt from the 2009 SHARE questionnaire. The SHARE questionnaire excerpt was translated into Finnish and pre-tested several times, including a cognitive pre-test. The questionnaire collects the life-history information retrospectively. To help respondents accurately remember their lives, SHARE and NoWork used an event history calendar in the data collection (Des, Martens, & Wijnant, 2011). Analyses of retrospective information on demographics, health, socioeconomic status, economic activity and social network in SHARE showed that the recall bias was minimal (Garrouste & Paccagnella, 2011; Havari & Mazzonna, 2015). NoWork deviates from the SHARE survey methodology in that it collected information from only one person per household, and in that the data was collected online. An online data collection is feasible in Finland, because internet use is among the highest in Europe, amounting to 94 per cent of the population aged 16 to 74 years in 2017 (Eurostat, 2018).

TNS Gallup collected the data from a sample that was representative of the Finnish population in terms of geographical region and age. Individuals with severe mental or physical limitations were excluded from the sample, because they could not have filled in the questionnaire. Wave 1 collected data from 403 individuals aged 65–70 years in 2016 (cohort 1945–51; see Honkanen, 2017). Wave 2 collected data from 993 individuals aged 50–55 years in 2017 (cohort 1961–67; see Niemi, 2017). The overall response rate was 29 per cent, being higher among the older (41 per cent) than among the lower (25 per cent) cohort. Because of the high nonresponse rate, the resulting sample is biased in terms of gender and geographical distribution. Women are underrepresented in the sample for the older cohort (43.7 % instead of 52.1 %) and overrepresented in the sample for the younger cohort (59.9 % instead of 49.7%) (Statistics Finland, 2018a). In both cohorts, people living in rural areas are underrepresented, with the bias being marginal in the older cohort (2.3 percentage points for people living in the rural heartland or periphery) and more pronounced in the younger cohort (6.7 percentage points for the same category) (Statistics Finland, 2018b).

When preparing the sample for analysis, twenty-seven individuals were excluded because of missing values. Such a list-wise deletion is unproblematic because the share of cases with missing values is low

(2 per cent) and because an analysis of the missing values suggests that the data was missing at random (Allison, 2001). Five more individuals were excluded from the sample because they were not part of the cohorts of interest. The final sample consists of 1964 individuals. Table 1 gives an overview of the sample composition by cohort and gender.

Table 1. Sample descriptive statistics, by cohort, unweighted data (in %).

	Baby boomers (1945–51)	Generation X (1961–67)	Total
<i>Entire sample</i>			
Gender: Women	43.7	59.9	55.4
Men	56.3	40.1	44.6
<i>Ages 15–50</i>			
Employment status: Working	64.7	62.0	62.7
Unemployed	0.8	4.8	3.7
Part-time retired	0.0	0.5	0.5
Retired	0.3	1.2	1.0
Non-employed	34.2	31.5	32.1
Health status: Ill	0.3	1.7	1.3
Not ill	99.7	98.3	98.7
Educational status: In education	20.9	17.8	18.6
Not in education	79.1	82.2	81.4
Children: Youngest child 0–2	14.9	11.4	12.4
Youngest child 3–5	10.6	7.4	8.3
Youngest 6–17	27.7	20.2	22.3
No child below 18	46.8	61.0	57.0
<i>Ages 15–64</i>			
Employment status: Working	63.9	-	63.9
Unemployed	1.3	-	1.3
Part-time retired	0.5	-	0.5
Retired	5.2	-	5.2
Non-employed	29.1	-	29.1
Health status: Ill	0.9	-	0.9
Not ill	99.1	-	99.1
Educational status: In education	15.7	-	15.7
Not in education	84.3	-	84.3
Children: Youngest child 0–2	10.7	-	10.7
Youngest child 3–5	7.6	-	7.6
Youngest 6–17	23.0	-	23.0
No child below 18	58.7	-	58.7

Variables

The socio-demographic characteristics are described with the respondents' gender ('male'/'female') and cohort ('1945–51'; baby boomer/'1961–67'; generation X). The respondents' employment status, participation in education and training, health status and presence of children are measured annually for the ages 15 to 64 years. The respondents' employment status is captured in the categories: 'working', 'unemployed', 'non-employed', 'part-time retired' and 'retired'. The participation in education and training

is measured using the answer categories: ‘in education or training’ and ‘not in education or training’. The health status is measured with the answer categories being: ‘long-term illness or disabled’ and ‘no long-term illness or disability’. The respondents’ childbearing history is captured in the categories: ‘youngest child is 0–2 years’, ‘youngest child is 3–5 years’, ‘youngest child is 6–17 years’, and ‘no child younger than 18 years’. The weight aligns the sample composition of each cohort with the population composition in terms of gender distribution and urban-rural split.

Table 1 shows descriptive statistics for these variables. It highlights that working for pay is the most common activity during the ages 15 to 50, amounting to about two-thirds of these years. Most of the time not spent on paid work is spent in non-employment. In this sample during these years, permanent illness and disability occur rarely, about one out of five years is spent on education and training, and two out of five years are spent with children under the age of 18. The generation X cohort spent slightly less time on education and with children under the age of 18, with the former fact reflecting the decreasing share of homemakers that spend their spare time on life-long learning, and the latter fact reflecting the decreasing fertility rates across the generations (Karisto, 2007). During the ages of 51 to 64, paid work again takes up most of the time (about 60 per cent), followed by retirement and non-employment. Education, long-term illness, and disability play hardly any role during these years, and only one tenth of the time is spent with children below the age of 18.

Analytic strategy

This study combines multichannel sequence analyses, cluster analyses, and descriptive statistics. Sequence analyses portray the development of situations over time, highlighting their changes and durations (Aisenbrey & Fasang, 2010). Multichannel sequence analyses portray the development of different situations at the same time, which in this study are the respondents’ workforce participation, educational participation, health status, and childbearing history (Gauthier et al., 2010). For example, they show whether mothers to young children stop working or whether older individuals with health problems retire from work. The sequence analyses are calculated with Lesnard’s dynamic Hamming measure. Hamming distances allow only for substitutions but not for insertion/deletion operations, which means that they explore the timing and temporal order of events without creating disturbances in the data (Aisenbrey & Fasang, 2010). Dynamic Hamming uses time-varying substitution costs which also capture non-linear dependencies (Lesnard, 2010). As a sensitivity test, the same analyses are additionally carried out with simple Hamming distances and with optimal matching using constant substitution costs of 2 and insertion/deletion costs of 1. The analyses are carried out in R, using the TraMineR library. The substantive findings were robust across the different metrics, showing that the findings are not methodological artefacts and instead have substantive meaning.

In a next step, cluster analyses using Ward’s method are conducted. The cluster analyses compare the sequences generated and indicate how they can best be grouped (Aisenbrey & Fasang, 2010; Kaufman & Rousseeuw, 2005). These analyses are carried out in R using the WeightedCluster library, which allows for weighting the cases in the cluster analysis. The weighting corrects the representativity bias in the sample, aligning the demographic structure of each cohort in the sample with that of the Finnish population in terms of gender distribution and urban-rural split (for more details, see Studer, 2013). Sequence and cluster analyses are carried out twice, once for the ages 15 to 64 for the baby boomers only, and once for the ages 15 to 50 for both cohorts. In a final step, descriptive statistics of the clusters and socio-demographic characteristics are carried out.

Results

We can obtain a first impression of the baby boomers’ life-courses from ages 15 to 64 from the dendrogram

in Figure 2. A dendrogram is a tree diagram that indicates how the sample can be split into clusters. The top of the dendrogram shows the solution if all cases are grouped in a single cluster, whereas the bottom of the dendrogram shows the solution if all cases are grouped in separate clusters. The dendrogram suggests a solution with two clusters, and the model fit indices confirm that this solution is the most suitable one.

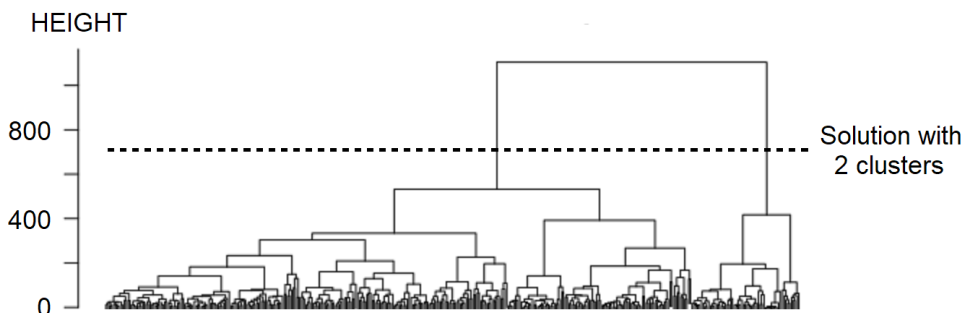


Figure 2. Dendrogram for the baby boomers' life-courses during the ages 15–64, weighted data.

Note. The solution with 2 clusters has the following model fit: Point Biserial Correlation = 0.69; Average Silhouette Width = 0.47; Hubert's Somers' D = 0.88; Calinski-Harabasz index = 98.93; Hubert's C = 0.07.

The two clusters obtained are displayed in Figure 3. This figure shows the sequence index plots for each life-course cluster identified, meaning the situations that each respondent is in during each year from age 15 to age 64. The horizontal lines in the plots represent the respondents. The progression of each line from the left to the right portrays the development over time. The respondents grouped in the first cluster work for pay for most of their working age. Most of them spend the beginning of their working age in education and later on have children. Hardly any of them experience a spell of poor health. The respondents grouped in the second cluster are non-employed during most of their working age. Most of them spend the early part of their working age in education, have children later on, and are of good health overall. A few of them spend most of their working age on education and training. Table 2 shows how often the clusters occur in the sample. The cluster characterised by work is much more common, accounting for 83 per cent of the weighted sample. The gender difference in its prevalence is not significant at the 5 per cent level (Chi-square test not shown in the table).

Figure 4 displays the dendrogram for the cluster analysis for the ages 15 to 50 among both cohorts. This dendrogram suggests that a solution with either three or four clusters best fits the data. The model fit indices show that the solution with three clusters is superior to the one with four clusters. Figure 5 shows the sequence index plots for these clusters. The individuals grouped in the first cluster work during most of their working age, have children, spend the beginning of their working age on education, and are of good health overall. The individuals grouped in the second cluster likewise spend most of their working age on work. Hardly any of them has children, and most are of good health overall. Moreover, they leave education earlier than their counterparts from the first cluster do, and some of them return to education and training during their later working age. The individuals grouped in the third cluster spend most of their working age being non-employed. Most of them have children, and almost all are of good health for most of their working age. About half of them participate in education, with some of them doing so for most of their working age.

Table 2 displays the frequencies for these clusters. The cluster characterised by paid work and having children is the most common one, occurring in six out of ten people. The cluster of work only is the second most common, and the one of non-employment is the rarest. The gender difference in the overall sample is not significant at the 5 per cent level (Chi-square test not shown in the table). However, there are marked cohort differences. Among the baby boomers, the cluster of work combined with having children is 14

percentage points more common, the cluster of work only is 19 percentage points less common, and the cluster of non-employment is 5 percentage points more common. The cohort differences are also visible within the genders. Among male baby boomers, the cluster of work combined with children is 23 percentage points more common, the focus on work only is 23 percentage points less common, and the pattern of non-employment does not differ across cohorts. These changes signify that the male overall workforce participation rate remained the same, but fewer men in the younger cohort have children. Among female baby boomers, the combination of work with children is 6 percentage points more common, the focus on work only is 16 percentage points less common, and non-employment is 10 percentage points more common. These changes signify that women’s workforce participation rate increased over time, mainly because more women decide to focus on work and forego having children instead of abstaining from paid work.

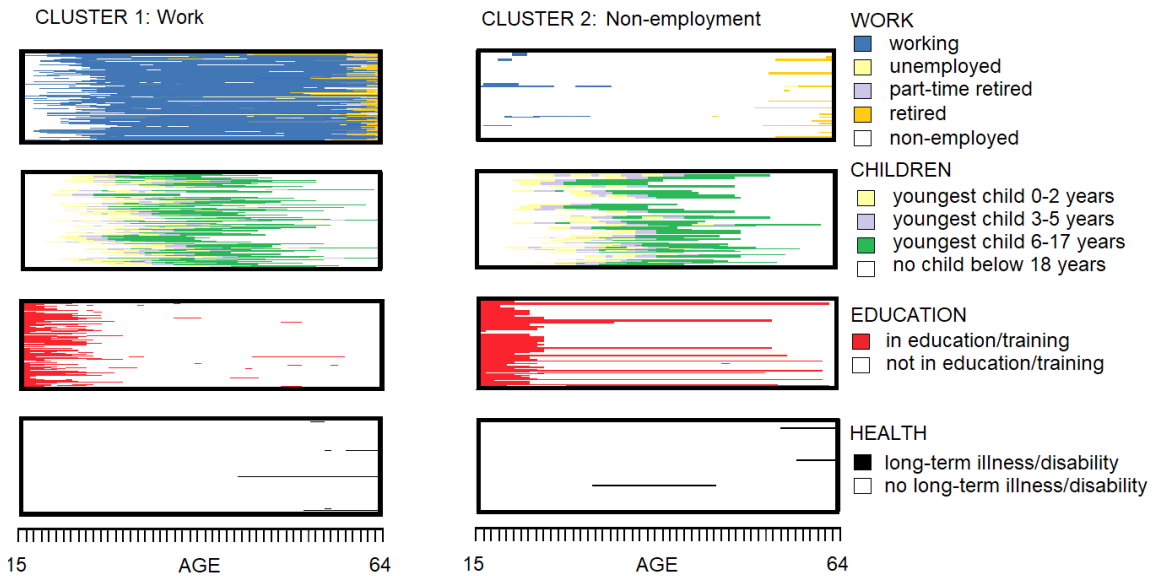


Figure 3. Clusters in the baby boomers’ life-courses during the ages 15–64, weighted data.

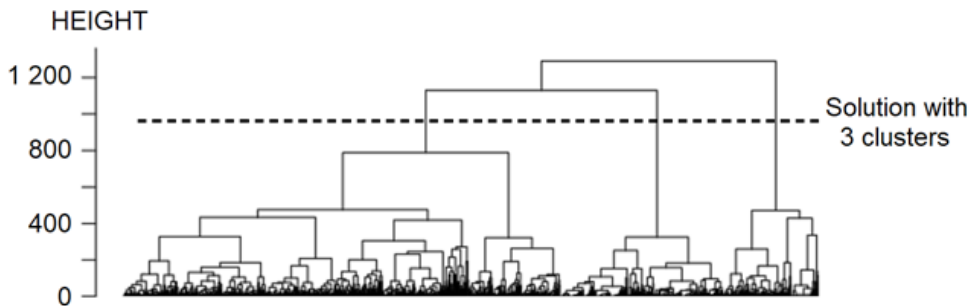


Figure 4. Dendrogram for all life-courses during the ages 15–50, weighted data.
 Note. The solution with 3 clusters has the following model fit: Point Biserial Correlation = 0.46; Average Silhouette Width = 0.27; Hubert’s Somers’ D = 0.56; Calinski-Harabasz index = 225.82; Hubert’s C = 0.20.

Table 2. Frequencies of the life-course clusters, by cohort and gender, weighted data (in %).

	Baby boomers (1945–51)	Generation X (1961–67)	Total
<i>Ages 15–64, entire sample</i>			
Cluster 1: Work	83.2	-	83.2
Cluster 2: Non-employment	16.8	-	16.8
<i>Ages 15–64, men</i>			
Cluster 1: Work	86.5	-	86.5
Cluster 2: Non-employment	13.5	-	13.5
<i>Ages 15–64, women</i>			
Cluster 1: Work	80.2	-	80.2
Cluster 2: Non-employment	19.8	-	19.8
<i>Ages 15–50, entire sample</i>			
Cluster 1: Work and children	72.0	57.7	61.7***
Cluster 2: Work, no children	10.0	29.4	24.0
Cluster 3: Non-employment	18.0	12.9	14.3
<i>Ages 15–50, men</i>			
Cluster 1: Work and children	77.0	53.7	59.9***
Cluster 2: Work, no children	9.0	32.1	26.0
Cluster 3: Non-employment	14.0	14.2	14.1
<i>Ages 15–50, women</i>			
Cluster 1: Work and children	67.7	61.8	63.5***
Cluster 2: Work, no children	10.9	26.6	22.1
Cluster 3: Non-employment	21.4	11.6	14.4

Note: Significance level of the Chi-square tests * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Discussion and conclusion

This study explores working-age life-courses in Finland. During working age, Finns may combine paid work, childrearing, and educational participation—while possibly even struggling with health problems. This study explores how they navigate the interplay of all these activities. Moreover, it compares two cohorts to investigate whether the interplay of activities changed over time.

The first research question was, what structure do Finnish working-age life-courses have? This study analysed the structure of the baby boomers' entire working age. The baby boomers recently lived past the working age, thereby providing a current picture of complete working-age life-courses. This cohort was born during Finland's agricultural period, where continuous paid work was the standard. Then, this cohort witnessed the decline of agriculture and the emergence of the Finnish welfare state, which is known for universally high employment rates. Consequently, the first hypothesis stated that the majority of the baby boomers' spent their working age on paid work. The second hypothesis was that only few working-age life-courses follow alternative structures. Findings show that the majority of Finnish baby boomers spent their working age on paid work. Only a small minority spent their working age in non-employment. Because of these findings, both hypotheses need to be maintained. The baby boomers show the typical

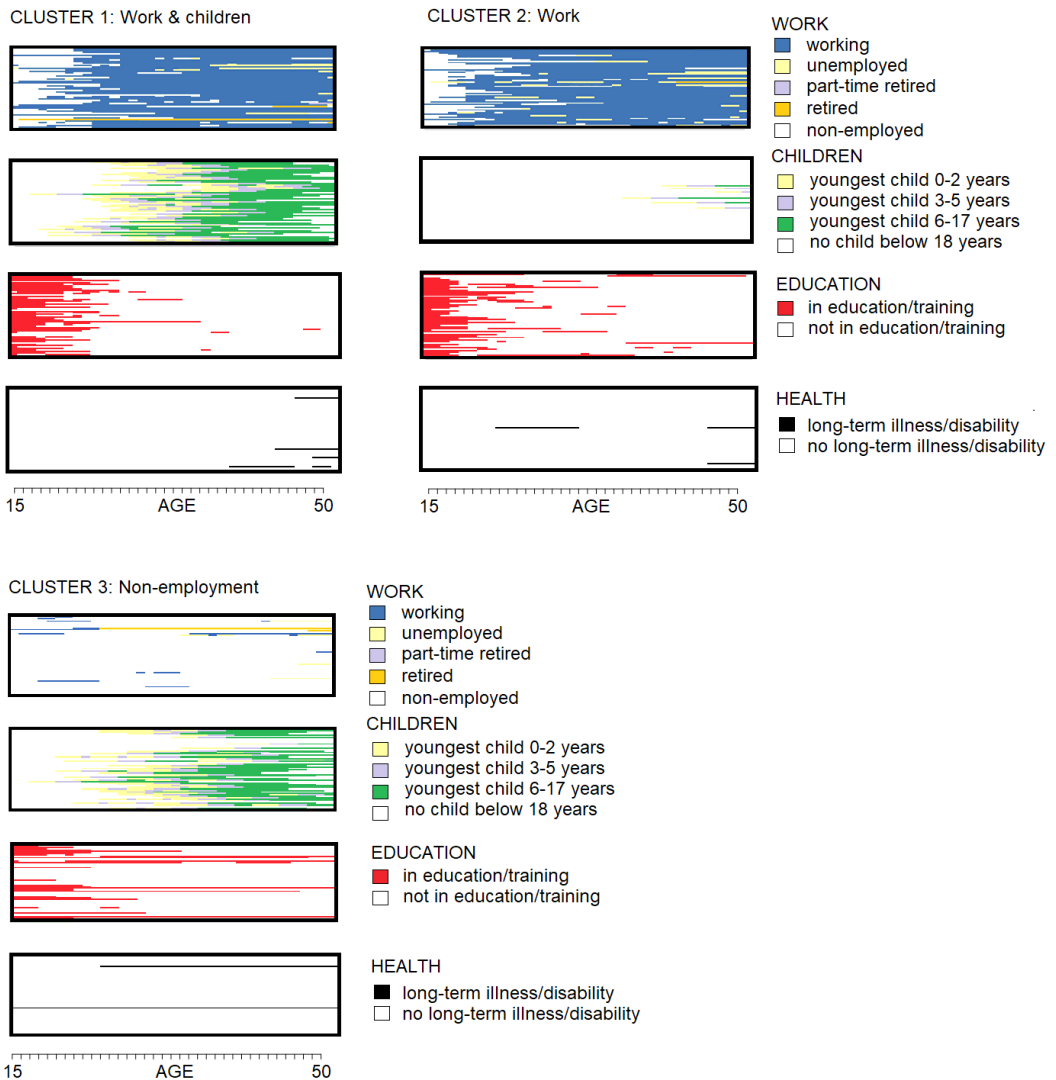


Figure 5. Clusters for all life-courses during the ages 15–50, weighted data.

work-centred life-course described by Kohli (2007), and this life-course pattern is highly standardised (Bruckner & Mayer, 2005). Findings gave additional indication of low diversity among the baby boomers’ working-age life-courses: neither the baby boomers’ educational participation nor their childbearing behaviour, nor health status is diverse enough to separate them into further groups. Likewise, there was no gender difference in the working-age patterns identified. These findings portray the baby boomers as a rather uniform group, and they highlight the low life-course diversity that is typical for social-democratic welfare states such as that in Finland (Mayer, 2005).

The second research question was, which cohort differences exist in working-age life-courses? Previous studies suggested that homogenous life-course patterns, such as the one identified for the Finnish baby boomers, became more diverse over time. In Finland, such a change may have come about when the agricultural society transitioned into an industrial and then post-industrial society. This development

created more options for unemployment and non-employment during working age, and it led them, women especially, to consider how they wanted to balance paid work and raising children. This study compares the ages 15 to 50 of the baby boomers and generation X (cohort 1961–67). The ages 15 to 50 capture the part of working age that is not affected by (early) retirement. Generation X was born later than the baby boomers, which may have made their life-course patterns more diverse. The third hypothesis suggested that more members of the older cohort spent their working-age life-courses on paid work. The fourth hypothesis proposed that interrupted working lives are more common within the younger cohort. Findings show that the cohorts differ in their working-age life-courses. The share of individuals who spent their working-age in non-employment decreased slightly, and the share of those who decided to work and had no children increased markedly. However, no pattern of interrupted workforce participation emerged. Consequently, both hypotheses have to be rejected. The Finns managed to avoid increasing economic inactivity and interrupted work biographies during the social change, but they did so at the cost of having children. This strategy is typical for the second demographic transition that Finland experienced (Kirk, 1996; Lee, 2003; Lesthaeghe, 2010). However, the age of first childbirth increased across cohorts, and it is possible that the members of generation X will still have children after the age of 50 (Sobotka, 2017). Such a development would lower the share of childless individuals within generation X.

An interesting finding is that the baby boomers' working-age life-courses formed two clusters when studied from age 15 to 64, but three clusters when studied from age 15 to 50 together with generation X. This circumstance has two reasons. First, the life-course pattern of work without having children was too rare among the baby boomers to form its own cluster, whereas it was more prevalent among generation X. Second, the baby boomers' latter part of working age, from age 51 to 64, was rather uniform. This uniformity partly standardises the baby boomers' working-age life-courses, even if the earlier part of working age showed differences. Future research should observe how the working-age life-courses from age 51 to 64 of generation X develop. If the observed trends continue, then new patterns may also emerge for those years, leading to even higher diversity. Overall, these observations confirm the idea that a de-standardisation of life-courses occurs in Finland (Bruckner & Mayer, 2005; Kohli, 2007).

The third research question was, which gender differences exist in working-age life-courses? The Finnish welfare state produces low gender differences in the labour market, but the childcare policies institutionalise gender differences at this low level. The fifth hypothesis captures this fact, suggesting that women of the younger cohort are more likely to have interrupted working careers when their children are young. Findings show that more female generation X-ers than female baby boomers entered the labour force during their working age. At the same time, more working women were childless, while the share of working mothers dropped only slightly. However, no pattern of work biographies interrupted for childcare emerged. Therefore, the fifth hypothesis has to be rejected. The 1985 cash-for-care scheme did not lead the women of Generation X to interrupt their working careers to provide childcare. Yet, the scheme allows non-employed mothers to generate income, thereby reducing their need to enter the workforce. Consequently, the scheme may create a group of non-employed women that are hard to activate for the labour market. Interestingly, the share of non-employment among women was considerably higher than that among men in the baby boom generation, but below that among men in Generation X. Therefore, the core group of persistently non-employed women that seems to be forming is of a comparatively small size.

The findings have theoretical and practical implications. Theoretical implications arise because the findings allow us to locate Finnish life-courses in international comparisons. Finland has a social-democratic welfare regime and is suggested to generate rather uniform life-courses with little gender differences and a high degree of labour market integration of men and women (Anttonen & Sipilä, 1996; Mayer, 2005). This characterisation seems appropriate, suggesting that Finnish life-courses resemble the life-courses of other social-democratic welfare states, and that the characterisation of life-courses in this welfare regime is accurate. The characterisation of Finnish life-courses as comparatively gender-neutral and integrated into the labour market is more accurate for generation X, which reminds us that the categorisation of life-course regimes is cohort-specific. Another cohort-difference identified is how working-age life-courses progress:

among the baby boomers, being working parents or non-employed was most common. In Generation X, in contrast, being working parents or childless workers was most common. Sirniö, Kauppinen and Martikainen (2017) highlighted that even younger cohorts may develop still different working-age life-courses. Cohort-sensitive descriptions of life-courses in welfare regimes should include such information.

A second theoretical implication arises from the insight on effects of the 1985 cash-for-care scheme. This scheme is said to institutionalise gender differences in life-courses (Eydal & Rostgaard, 2011). This study found smaller gender differences in working-age life-courses after the scheme was introduced. The introduction of the scheme did not lead women to interrupt their work biographies. Instead, it seems that the scheme created a small group of women that persist outside the labour market. Additional studies are needed to further investigate this observation.

Practical implications arise because the findings affect the future of pensions and caregiving in Finland. Women's increasing workforce participation implies that women are building up increasing pension benefits, which will lower their risk for old-age poverty. A second practical implication arises because women's increasing workforce participation suggests that middle-aged women will increasingly feel the double pressure of work and caregiving to elderly parents as time progresses. Caregiving to one's parents and grandparents becomes a more common task in ageing societies, such as Finland, and it is often carried out by middle-aged females (Daatland, Veenstra, & Lima, 2010). As a consequence, older female workers may require increasing amounts of support if they are to continue participating in paid work. The health and social care services for old-age needs need to be carefully developed for this purpose (see Andersen, 2015). A third implication unfolds from the findings that the number of individuals with children decreased. This trend means that a growing number of middle-agers will lack younger kin to provide them with old-age care in the coming decades. As a result, a lack of informal care for older people may develop and the supply for formal health and social care services for older people may have to be expanded. This finding is in line with Pickard (2015), who came to a similar conclusion for the future development in England.

Despite its merits, this study also has some limitations. First, the life-course data was collected retrospectively. As a result, it may suffer from recollection bias. The survey used an event history calendar to minimise this risk, which previous studies had identified as a suitable and successful instrument for eliminating such bias (Garrouste & Paccagnella, 2011; Havari & Mazzonna, 2015). Therefore, a recollection bias in the data should be minimal, if it exists at all. Second, individuals living in urban areas were overrepresented in the sample. This bias was corrected through weighting. As a result of the weighting, the study may underestimate the diversity of life in rural areas. A future study on the diversity of rural life-courses could shed more light on this phenomenon. Third, the survey did not include individuals with severe mental or physical limitations at the time of data collection. Such individuals would have had problems participating in the survey and were, therefore, excluded from the data collection. As a result, this study underestimates the share of life-courses shaped by disability and long-term illnesses in late working age. A separate study focusing on individuals in this population would be fruitful. It could assess how many individuals experience disability or long-term illness in the end of their working age. Moreover, it could determine how long these spells last and whether or not they constitute an additional life-course pattern. Fourth, the dataset does not differentiate between full-time and part-time work. As a result, it cannot test for life-course patterns that are characterised by part-time work. However, part-time work is rare in Finland (Ronsén & Sundström, 2002). Therefore, part-time work is most likely a sporadic event in few working-age life-courses, instead of a defining element of its own life-course pattern.

In conclusion, Finnish life-courses are characterised through small gender differences and high female workforce participation rates, thereby confirming that Finnish life-courses reflect the social-democratic welfare regime. However, these characteristics are more pronounced within generation X than among baby boomers, rendering the picture of Finland as a transitional one that needs to be revisited when the next generation ages. Remarkably, Finnish women are catching up to their male counterparts in terms of workforce participation and may even overtake them within generation X. Future studies would need to investigate the implications of this shift in terms of work-family balance and household dynamics. Moreover, the co-

hort differences in life-courses point to a potential shortage in informal care for older people, which care service providers and policymakers should consider addressing

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Author biography

Kathrin Komp-Leukkunen (Dr.Soc.Sci) is associate professor at the University of Helsinki. She specializes in research on population ageing, life-courses, welfare states, and research methods. Recent

projects explore life-course influences on old age and methods for forecasting. She was a Marie Curie fellow and she serves on the Executive Committee of the European Sociological Association.