FAMILY PATHWAYS, GENDER, AND MID-LIFE EARNINGS

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ABSTRACT

Previous research documents increased diversity of family pathways in developed societies. Yet little is known about the links between diverse family pathways and economic well-being of women and men. We use exceptionally rich Finnish register data and address three questions focusing on persons born 1969 and 1970 between ages 18 and 39: (1) Which family pathways are 'typical' in Finland? (2) How are typical pathways associated with mid-life earnings? (3) Are those associations gendered? On the basis of sequence and cluster analysis applied to trajectories of union dynamics and childbearing, we distinguish nine typical family pathways. Regression models show remarkable differences in mid-life earnings by family pathway for men, with marriage and childbearing associated with highest earnings and neverpartnering with the lowest. Among women, the earnings differentials by family pathway are much narrower and largely accounted for by socioeconomic selection into cohabiting and single motherhood.

INTRODUCTION

Family formation has become increasingly diverse across developed societies in the past decades. People postpone or forego marriage and parenthood, and divorce and separation rates have risen along with increasing rates of cohabitation and non-marital childbearing (Bumpass & Lu, 2000; Cherlin, 2010; Goldscheider, 1997; Kennedy & Ruggles, 2014; Shanahan, 2000). More generally, in North America and Europe, standard family formation stages characterize smaller parts of the population and transitions between them occur at more dispersed chronological ages – often summarized as the 'de-standardization' of family formation (Brückner & Mayer, 2005; Elzinga & Liefbroer, 2007; Widmer & Ritschard, 2009). As a consequence, on average individuals spend more time in cohabiting relationships and without a partner in early adulthood before and after entering parenthood than a few decades ago. In contrast to this well-documented de-standardization of family formation, we know very little about the consequences of increasing family diversity for parents and children in terms of economic and subjective well-being, as well as parenting and family interactions.

Another literature focuses on the association of different family structures and economic resources, and argues there are strong links between family dynamics and economic resources (McLanahan & Percheski 2008, Western et al. 2008). These studies however often lack longitudinal information on longitudinal family formation trajectories, and/or detailed reliable data on income.

One open question is whether the socioeconomic inequalities in life courses and their linkages to family pathways are gendered. In particular, we know relatively little about how associations between family pathways in early adulthood and earnings in mid-life vary for men and women in different welfare state contexts. Previous research has shown that the antecedents of family formation and stability are notably gender neutral in some countries, especially in the gender-egalitarian Nordic societies. For instance in Finland high education, employment, and high earnings promote union formation, childbearing and union stability equally for men and women with very little or no notable gender differences (Jalovaara 2012; 2013; Jalovaara & Miettinen 2013; Jalovaara & Fasang 2015). However there is fragmentary evidence that even in such countries, the consequences of family formation are different for women and men. Women continue to bear the major share of unpaid care work. For instance they take longer family leaves and more frequently become single parents even in the gender-egalitarian Scandinavian countries.

All in all, if the diverse family pathways are associated with economic inequalities, perhaps modified by gender, this may have profound consequences for the reproduction of social and economic inequalities in individual life courses, between genders, and across generations.

In this study we use exceptionally rich Finnish register data to address three questions: (1) Which family pathways (from ages 18 to 40) are 'typical' in Finland? (2) How are the typical pathways associated with mid-life earnings? And, (3) are those associations gendered? We focus on women and men born 1969 and 1970. Sequence, cluster and regression analyses are applied to data on monthly histories of family dynamics and education, and yearly histories of employment and income from different register based sources.

<Figure 1: The study design>

Figure 1 illustrates our study design. Of main interest is the association between family pathways and mid-life earnings, and whether they are modified by gender. The family pathways combine states entered via the formation and dissolution of cohabitations and marriages, via childbearing, and residence with children. The main outcome is individual earnings at age 39. However, supplementary analyses will be performed using individual income (earnings plus social-security benefits) and equivalised household income, as we are interested in seeing whether any the differences in earnings we find are buffered by the state (social-security benefits) or a partner's income. We control for factors that are potential confounders in the association between family pathways and mid-life earnings, namely, factors related to childhood family background, one's own educational attainment, and importantly also employment stability and earnings in early adulthood, before or at the onset of family formation.

This study contributes to previous literature in several ways. We take a holistic life-course approach to family trajectories. We use advanced data and methods, applying sequence, cluster and regression analyses to exceptionally rich and detailed Finnish register data. They include monthly histories of the formation and dissolution of cohabitations and marriages as well as childbearing, and histories of education, employment, and income from different register based sources. We use data for two specific birth cohorts (1969 and 1970) that we can follow without attrition for large case numbers until age 40 (N=12,089).

In addition to offering these unique data, Finland is also a substantively particularly interesting setting. Finland is among the forerunner societies in terms of the Second Demographic Transition, with high rates of nonmarital cohabitation and union dissolution. It is also among the leading countries in terms of gender equality (Hausmann et al. 2014). Employment patterns are very similar for men and women: women also tend to work full-time, and to stay in the labor force continuously until retirement age, however taking family leave when they have young children. Many state policies are targeted at facilitating the combination of paid work and family. Thus the Finnish case thus offers a possibility to examine how contemporary family dynamics, gender, and earnings are linked in a gender-egalitarian and comparatively family-friendly Nordic welfare state.

DATA

We use data that were compiled at Statistics Finland (permission TK53-663-11) by linking data from a longitudinal population register and registers of employment, educational qualifications and vital events, and other register sources. The extract used in this study is taken from a random 11 % sample of persons born from 1940–1995 who had been counted in the population of Finland between 1970 and 2009. The data include full histories of co-residential partnerships for the sample persons until 2009.

From 1987 onwards the union histories cover not only marriages but also cohabitations. Finnish registers contain information on the place of residence to the specific dwelling, thereby enabling the linkage of different-sex individuals to co-residential couples, even when they are unmarried and childless. A cohabiting couple is defined as a man and a woman who are registered as domiciled in the same dwelling for over 90 days, who are not close relatives (siblings or a parent and a child, for example) or married to each other, and whose age difference is no more than 20 years (this rule does not apply if the couple has shared children). A limitation is that non-cohabiting or LAT (Living Apart Together) relationships go unnoticed.

In this study, we focus on the birth cohorts from 1969 and 1970 because the longest complete union histories exist for these cohorts: the 1969 cohort is the oldest to have histories of all co-residential unions from the year of their 18^{th} birthday. For the first time, these data enable us to study full family formation trajectories until the age of 39.

As for parenthood, we focus on having (registered) biological children. Moreover, we divide single (not currently partnered) parents into resident and non-resident parents. For 1.3 % of the women's children in our data, there is no father registered. If the parents of a child seemed to form a co-residential union only after the birth of the child, the date of union formation was moved to just before the childbirth. This ensures that the non-union childbearing included in the analyses only covers cases in which the child's parents formed a union neither before nor after the childbirth.

We use sequence analysis (Abbott 1995) to analyse family trajectories from ages 18 to 39, which comprises 259 months for both cohorts and covers 6,211 men and 5,878 women, with 12,089 persons in total. Data on those who died or emigrated between ages 18 and 39 were excluded. We conduct analyses for the following specification of sequence states: 1) "Living alone, childless", 2) "Living alone, non-resident parent", 3) "Single, resident parent", 4) "Cohabiting, childless, 5) "Cohabiting, 1 child", 6) "Cohabiting, 2+ children", 7) "Married, childless", 8) "Married, 1 child, and 9) "Married, 2+ children". The histories are monthly, but in this study we use data split into 3-month intervals. Individuals who separate form cohabiting or married unions are in the categories that combine "Living alone" or "Single" with or without children.

Our main outcome variable is individual earnings at the age of 39. In supplementary analyses we also experiment with individual income (comprising earnings as well as social-security benefits such as government payments for unemployment, sickness, and disability, as well as parental leave benefits), and equivalised household income. All of these variables are based on an individuals' (in the case of household income, also the partner's) annual income subject to state taxation. In order to control for inflation the amounts were transformed into 2009 values using the cost-of-living index (Statistics Finland 2009). In the interest of the concreteness of results, the income variables are kept as absolute euro amounts. In order to reduce the positive skewness of the distributions, data on persons with income or earnings greater than 100,000 euros per year, which are top coded in the original data from the tax registries as well, were recoded as 100,000 euros.

All analyses are performed separately for women and men. A number of control variables are included that we consider confounders that influence a person's family pathway as well as mid-life earnings (and income), potentially accounting for their association. The control variables are divided into three groups. Our first regression model of mid-life earnings includes the family pathway variable (based on clusters) as the only explanatory variable, and

the control variables are then added to the model one group at a time to see how their inclusion affects the earnings/income differentials by family pathway. The control variables are the following:

Group I. Childhood family background

- *Parental socioeconomic status* is inferred from data on occupational class in 1980, when the study cohorts were between ages 10 and 11. For children under 16, the occupational class is determined by the occupation of the household's 'reference person'.[1] Categories are: Blue-collar worker, upper white-collar employee, lower white-collar employee, self-employed farmer, other self employed, employer, and other.
- Degree of urbanization of the *place of residence in childhood*, measured in 1980 (at age 10–11. The categories are urban, semi urban, and rural.
- A dummy for having *lived in a single-parent family* as a child (in one of the years 1975, 1980, and 1985 as we only have this information in 5 yearly intervals).

Group II. Education

- *Educational attainment*: We constructed a variable indicating the level of highest education. The levels are 1) basic (individuals with no registered post-comprehensive education), 2) vocational secondary, 3) gymnasium, 4) lowest tertiary, 5) lower tertiary, and 6) higher tertiary.
- *Age* when the highest education was completed.

Group III. Employment stability and earnings in early adulthood

- *Months unemployed* (a registered job seeker) between years 1987 and 2000, collapsed in three categories: 1) less than 12 months, 2) 12–36 months, and 3) more than 36 months.
- *First earnings* (logged) when "main type of economic activity" was "employed".
- *Age* when "main type of economic activity" was "employed" for the first time.

[1] Reference person is the individual who is interpreted as having the primary responsibility for the subsistence of the household. In two-parent families, it is in practice the parent with higher income, who in most cases is the father.

In preliminary regression models, we also controlled for migrant background (having born abroad) as well as rural residence in adulthood, but they were dropped as controlling for them did not affect the results.

METHODS

We use sequence analysis (Abbott 1995) and cluster analysis to group the individual family trajectories into clusters of "family pathways". We understand family pathways as collective patterns shared by a group of individuals with similar family life courses.

First, sequence analysis is employed to determine how similar each possible pair of family sequences is using the Dynamic Hamming Distance (DHD) (Lesnard 2010). The Dynamic Hamming Distance places particular emphasis on similarity in terms of the timing of transitions: those individuals are considered to have similar family trajectories, who transition between two states at the same age. This is achieved by not using any indel operations and calculating time-point specific substitution costs for substituting family states in the alignment of two sequences (for details see Lesnard 2010, Aisenbrey and Fasang 2010). We consider this emphasis on timing particularly meaningful in the context of family life courses, given that the timing of union formation, union dissolution and parenthood interacts very differently with education and employment trajectories. Therefore the timing of family events is likely consequential for individuals' earnings position in mid-life. The output of the Dynamic Hamming Matching is summarized in a pairwise distance matrix that contains a distance value for each possible pair of family sequences to summarize how much they resemble one another.

Second, we enter the distance matrix from the sequence analysis into a ward cluster analysis. The most discriminant number of groups is derived based on several cluster-cut off criteria. Figure 2 shows the strongest support of several cluster cut-off criteria for a grouping into nine clusters, including the weighted Average Silhouette Width (wASW), Point Biserial Correlation (PBC) and Huber's Gamma Sommer's D (HGSD) (see Studer 2013). The weighted Average Silhouette Width for nine clusters is .26 and therefore indicates adequate structure in the sequence grouping (Studer 2013).

<Figure 2: Cluster cut-off criteria for different numbers of clusters>

Third, we visualize the nine family pathways using relative frequency sequence plots (Fasang and Liao, 2014, see also Raab et al 2014). Relative frequency sequence plots plot a selection of representative sequences as sequence index plots, where each line in the figure represents one individual sequence coding different family states with different colors. The timeline is age, displayed on the x-axis. For our large sample of over 12,000 cases it is impossible to plot all sequences in a sequence index plot. The lines would be plotted on top of each other and visually distort the data. To avoid this, relative frequency sequence plots select representative sequences in several steps. We plot relative frequency plots for each of the nine clusters separately to visualize the "family pathway" of this group of individuals. First the family sequences in each cluster are ordered according to the complexity of the sequences (Elzinga 2010), such that the most complex sequence with the most frequent changes between family states is at the top and the least complex sequence is at the bottom of a plot. Then the sorted set of sequences is partitioned into *k* equal sized frequency groups. For each frequency group the medoid sequence is selected as a representative. The medoid sequence is the sequence with the lowest sum of distances to all other sequences in the respective frequency group. The selected representatives are plotted as sequence index plots. Relative frequency sequence plots come with an additional distance-to-medoid box plot that visualizes the distances of all sequences in a frequency group to their respective representative medoid. The distance to medoid plot adds the information on how homogeneous a given cluster is across the sorted sequences. If the average distances to the medoid are high, the sequences summarized in these frequency groups are heterogeneous. If the average distances are low, the sequences represented by this medoid are homogeneous.

Finally, we enter the nine clusters of family pathways as independent variables in OLS regression models on earnings at age 39. The models are calculated separately for men and women, because a joint model showed significant interactions for the family pathways and gender (not shown here, available from authors): the same family pathways are associated very differently with earnings in mid-life for men and women – even in gender-egalitarian Finland. The gender-specific models proceed in three steps to asses the extent to which covariates can account for the association between family pathways from age 18-39 and earnings in mid-life. First, we enter (1) childhood background characteristics, followed by (2) information on respondents educational attainment and (3) employment stability and earnings in early adulthood. This allows us to see, whether differences in earnings at age 39

for different family pathways are due to differential background, education and labor market participation or if there are gender-specific earnings differences beyond that.

All sequence and cluster analysis were conducted using the R packages TramineR, TraMineRExtras, and WeightedCluster (Gabadinho et al. 2011; Studer 2011).

PRELIMINARY RESULTS

Typical Family Pathways: Sequence and Cluster Analysis

The nine clusters consist of four family pathways characterized by different variants of marriage, and five family pathways, in which marriage is irrelevant. Relative frequency sequence plots for each cluster are shown in Figure 3 for the four marriage pathways and in Figure 4 for the five non-marriage family pathways. Table 1 summarizes descriptive information on the distribution of gender, education, the average sequence complexity, as well as the average sequence distance as an indicator of the homogeneity of each cluster, i.e. each family pathway.

The four marriage pathways divide into 1) “Late marriage, 2+ children”, 2) “Early marriage, 2+ children”, 3) “Marriage, 1 child” and a 4) “Childless marriage” group. The two first clusters differ from each other with regard to timing: the 1) “Late marriage” group on average enters marriage at age 30 to 33, whereas this happens considerably earlier between ages 20 and 25 for the 2) “Early marriage” cluster. Two or more children in stable married unions characterize both of these family pathways at age 39. Moreover, 2) “Early marriage, 2+ children” is the most common family pathway for our study cohort in Finland (23 percent of this population). Together the two “Marriage, 2+ children” pathways make up 37 percent of our study cohort.

The two remaining marriage pathways are considerably smaller at 7 percent for the 3) “Marriage, 1 child” group and only 4 percent for the 4) “Childless marriage” pathway. Interestingly, direct marriage without prior cohabitation is fairly common among individuals in the “Childless marriage” pathway, which is not the case for any of the other marriage pathways. For individuals in the 4) “Childless marriage” group, average age at marriage is relatively early between ages 25 and 28, suggesting that the reason for their childlessness is

not age-related (Figure 3). This pathway likely also contains involuntary childlessness among married couples. The low average sequence complexity (6.7) and sequence distance (113.1) in the 4) "Childless marriage" pathway compared to the other groups (Table 1), show that these individuals experience particularly stable and homogeneous family trajectories. The proportion of higher tertiary education is somewhat higher in all four marriage family pathways, particularly in the "late marriage, 2+ children" group compared to the sample average. In terms of gender they are also fairly equally distributed with a slightly higher prevalence of men among the 1) "Late marriage pathway" (56%) and a somewhat higher share of women in the 2) "Early marriage, 2+ children" group (59%). This reflects expected timing differences with a slightly later onset of family formation for men than for women.

The five remaining family pathways divide into a 5) "Cohabitation, 2+ children", 6) "Childless Cohabitation", 7) "Single, non-resident parent", 8) "Single, resident parent" and 9) a "Never partnered childless" group (Figure 4). Together these five clusters account for 53 percent of the population for who are not married with or without children at age 39, and for whom marriage has not been formative of their early adult family trajectories. The first cohabitation pattern 5) "Cohabiting with 2+ children" shows a relatively orderly family pathway where most individuals cohabit and than have one and two children within a short period of time (top left panel, Figure 4). Individuals in this pathway show quite stable trajectories with hardly any separation by age 39. The second cohabitation pathway 6) "Childless cohabitation" groups individuals who remain un-partnered with only brief cohabiting episodes, indicated by the light green color, until around age 33. Around age 33 they enter longer-term cohabiting unions without children. They are one of the larger groups accounting for 14 percent of the population.

The two single parenthood pathways divide into a non-resident and resident single parent group. The 7) "Single, non-resident parent" pathway comprises the most unstable family trajectories switching between cohabitation with one child, non-resident parenthood and brief episodes of resident parenthood indicated by the dark blue color (lower left panel of Figure 4). This is also the most heterogeneous family pathway with the highest average distance of all family sequences to each other compared to all other family pathway clusters (Table 1). The second single parent group 8) "Single, resident parent", is the second heterogeneous group with a similarly high average sequence distance, which underlines the high diversity of family trajectories characterized by single parenthood. In contrast to the 7) "Single nonresident parent" cluster in which single parenthood was mostly preceded by

unmarried cohabitation, marriage and divorce occur in about 40 percent of pathway 8) "Single, resident parent. Not surprisingly, the non-resident cluster contains 71 percent men, whereas the resident single parent group consists of 76 percent women. However this also implies that one fourth, 24 percent, of resident single parents are men who do live with their children. Both single parent family pathways are notably lower educated on average compared to the total sample (Table 1).

The last family pathway, 9) "Lone Wolves" comprises individuals who are childless, have not or only very briefly cohabited and have not been married by age 40. This family pathway accounts for a substantial 20 percent of the population. It is predominantly male (63%) and lower educated (Table 1). Note that the individuals in this group possibly are dating and involved in couple relationships. However, these do not tend to reach a stage of commitment at which the two partners would move in together or get married.

Family Pathways and Mid-Life Earnings: Earnings Distributions and Regression Analyses

We now move on to study how the family pathways from age 18-39 are associated with mid-life earnings. Figure 5 and 6 show the distribution of women's and men's earnings at age 39 in each family pathway cluster. Among both genders, there are three clusters with a quite notable proportion of persons with low earnings. These are "married childless", "non-resident single parents" and, especially among men the "lone wolves" cluster of the childless and never partnered.

The family pathway clusters discussed above are used as explanatory variables (dummies) in regression models of earnings at age 39. Table 2 shows the results as regression coefficients and their standard errors. The regression coefficients are also shown in Figure 7. They only show the results for each family cluster from different models, each fitted separately for women and men. Model 1 includes the family pathway cluster only. In models 2–4 the control variables are added one group at a time. The effects of the control variables (not shown) were as expected: mid-life earnings were significantly and positively associated with white-collar parental class, higher education, having few unemployment months, high earnings in early adulthood. Earnings at age 39 were negatively associated with rural residence, living in a single-parent family in childhood, and having completed the highest educational degree and entered employment at a higher age.

<Table 2. Regression models of earnings at age 39 by gender; regression coefficients (B) and standard errors (in parentheses).>

<Figure 7. Regression models of earnings at age 39 by gender; regression coefficients.>

The regression results suggest that there are wide differences in men's mid-life earnings between family pathway clusters. The clusters characterized by marriage are associated with highest mid-life earnings, and the number of children or the timing of marriage does not seem to make any difference: the other marriage clusters do not significantly differ from the reference group, which is the "Late marriage 2+ children" cluster. The clusters involving unmarried cohabitation, single parenthood, or never partnering are associated with significantly lower earnings than the reference group. The differences are to some extent accounted for by selection into these groups, but there are notable differences even in Model 4 that includes all control variables, even employment stability and earnings in early adulthood. The "lone wolves" cluster of never partnered and childless men is associated with by far the lowest earnings for men. Less than half of the earnings difference between them and the reference cluster "Later marriage, 2+ children" is accounted for by the control variables. For men's "non-resident parent" cluster, Model 1 shows earnings about as low as for "lone wolves", but most of the difference is explained by socioeconomic selection for non-resident fathers.

For women, the regression models show much narrower differences than for men in mid-life earnings between family pathway clusters. The patterns are also different. Among married women, there seems to be a slight motherhood penalty in that the "married childless" and "married one child" clusters are associated with higher mid-life earnings than the reference cluster ("Late marriage with 2+ children), and these differences are not accounted for by the control variables. The "Childless cohabitation" cluster was associated with somewhat higher earnings than the reference cluster. In contrast, the clusters that involved childbearing in cohabitation were associate with lower mid-life earnings, and so where the "single parent" and "lone wolf" clusters. However, these differentials were accounted for by selection of lower educated women into these groups, and in Model 4, the coefficients were positive, which was not at all the case for men.

The gender earnings differential is reflected in the notable gender difference between models for women and men in the constant term. For instance, based on Model 4, we see that the highest-earning cluster of women ("Married childless") earn as much as the lowest-earning cluster of men ("Lone wolves"), both around 24,500 euro per year. Overall, we find a stronger association between men's family pathways and mid-life earnings than for women, which is indicated by higher R^2 in all models for men compared to women. However, even in gender-egalitarian Finland the worst-off men in terms of family pathways in early adulthood still earn as much as the best-off women.

CONCLUSIONS BASED ON PRELIMINARY RESULTS

Previous research suggests that in Finland, factors affecting family formation and stability are notably gender neutral. While there are notable differences in longitudinal family trajectories by educational attainment, the gender differences in these trajectories within educational groups are negligible (Jalovaara & Fasang 2015). However, our results suggest that the associations between different family pathways and mid-life earnings greatly vary by gender. Earnings differences by family pathways are much wider for men compared with women. For men, we find a remarkable marriage premium, whereas men who were never partnered and childless at age 40 had the lowest earnings among men. In contrast, for women we also find a marriage premium, with the highest earnings for married childless women. However, there is a motherhood penalty for women in Finland that does not extend to fathers.

NEXT STEPS

Next, we will experiment with different income measures: income (comprising earnings and social-security benefits), and equivalised household income. Further we will elaborate our theoretical framework and specify the features of the Finish context that might drive our findings.

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FIGURES AND TABLES

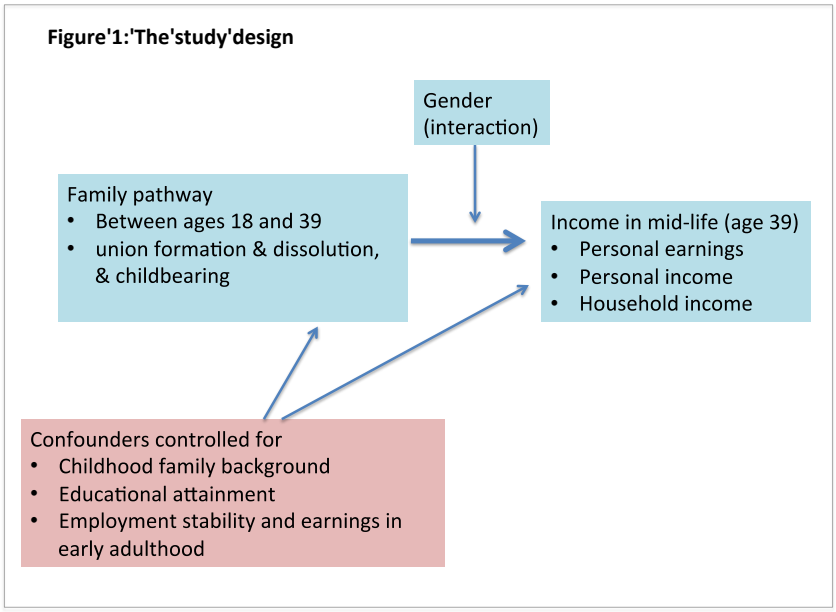


Figure 2. Cluster cut-off criteria for different numbers of clusters

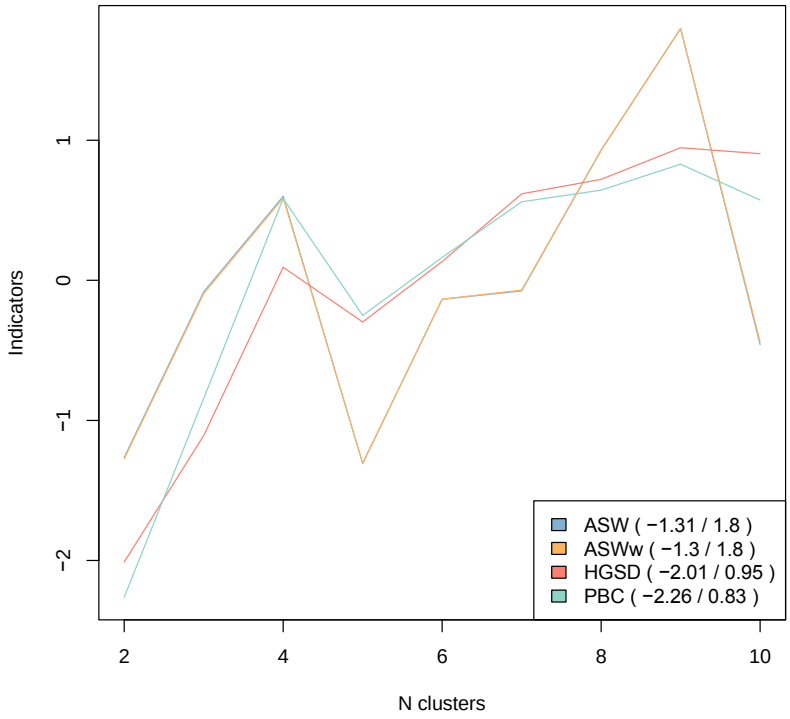
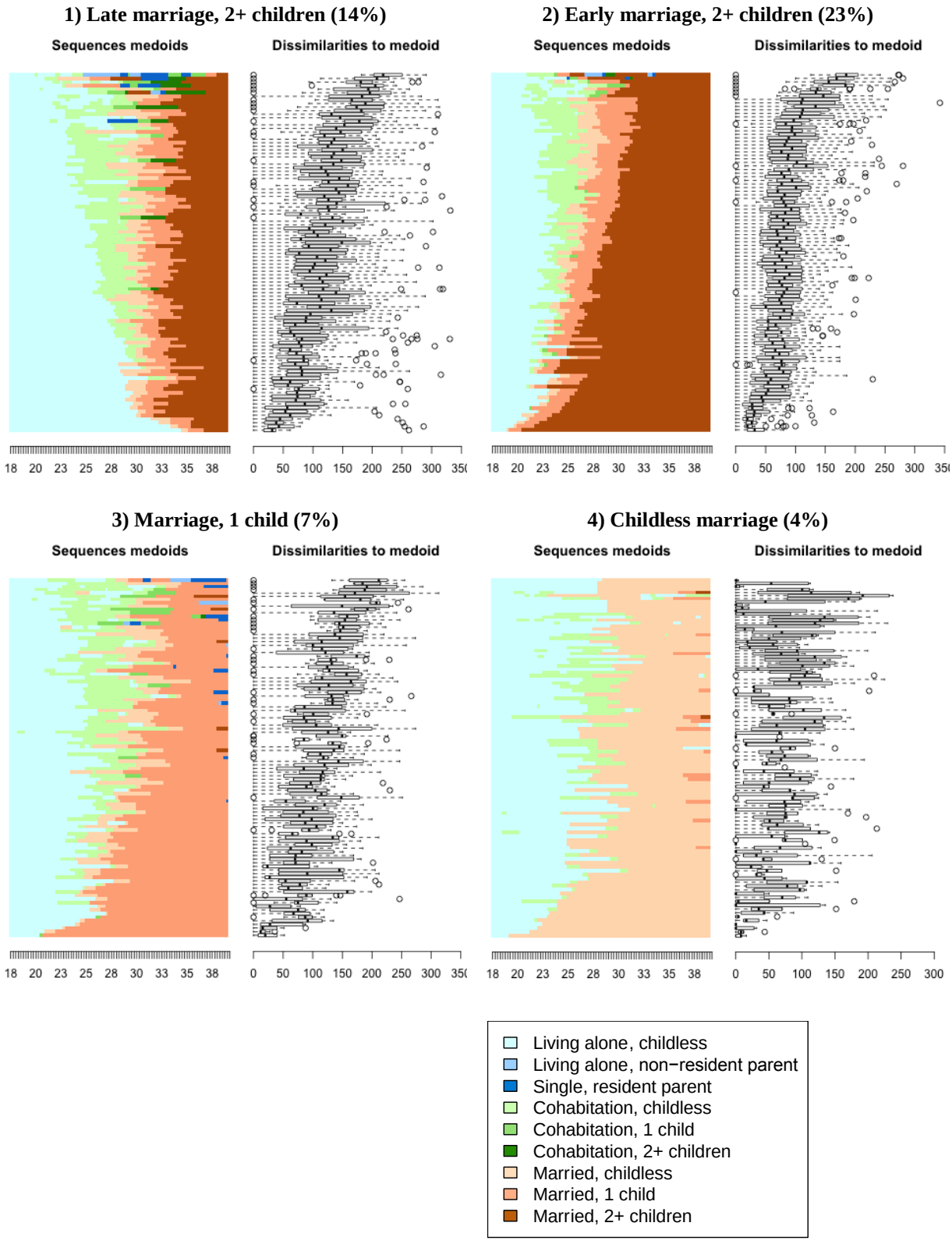


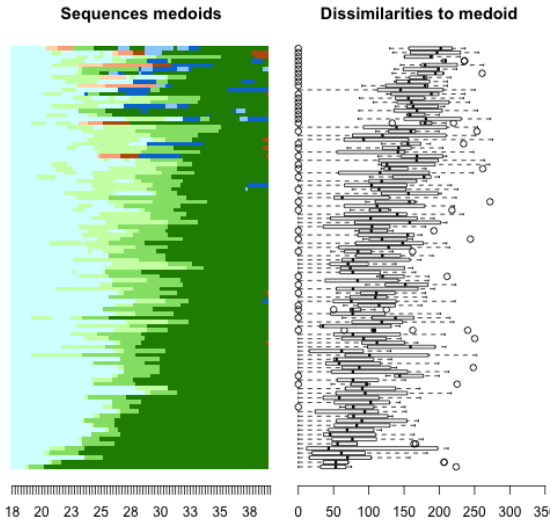
Figure 3. The four family pathways characterized by marriage (view in color)



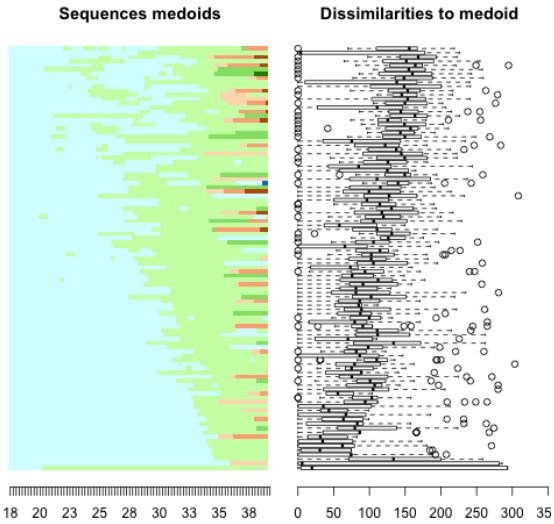
Note: representative sequences, sorted descending from most complex to least complex sequence.

Figure 4. The five family pathways not characterized by marriage (view in color)

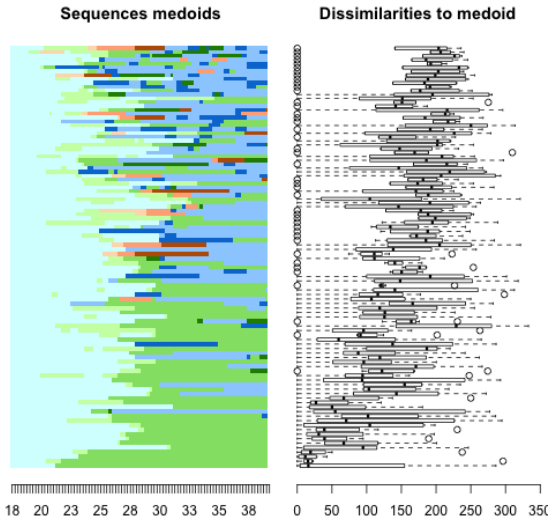
5) Cohabiting, 2+ children (7%)



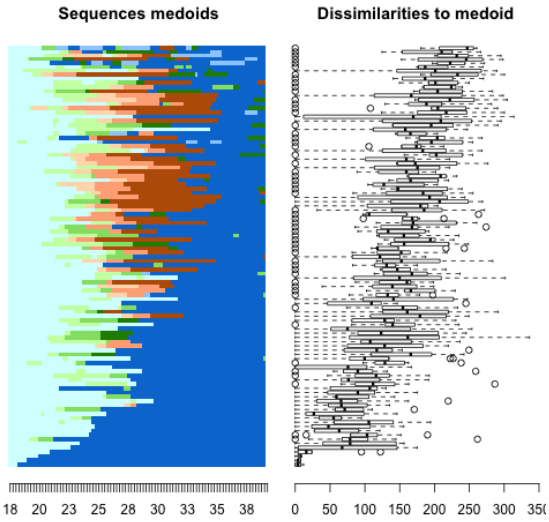
6) Childless cohabitation (14%)



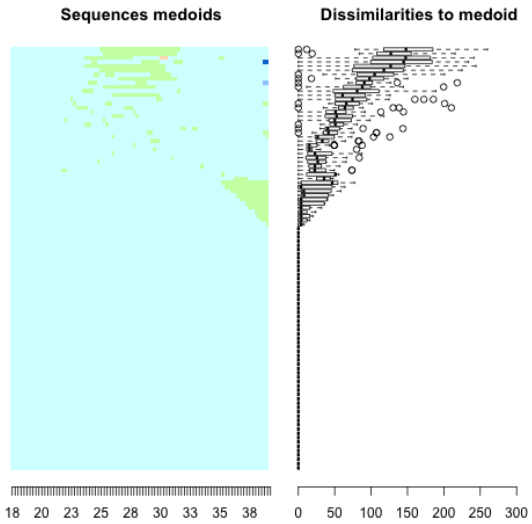
7) Single, non-resident parent (5%)

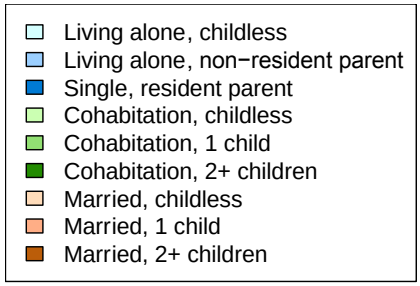


8) Single, resident parent (7%)



9) Never partnered, childless (20%)





Note: representative sequences, sorted descending from most complex to least complex sequence

Figure 5. Distribution of women's earnings at age 39 by family pathway

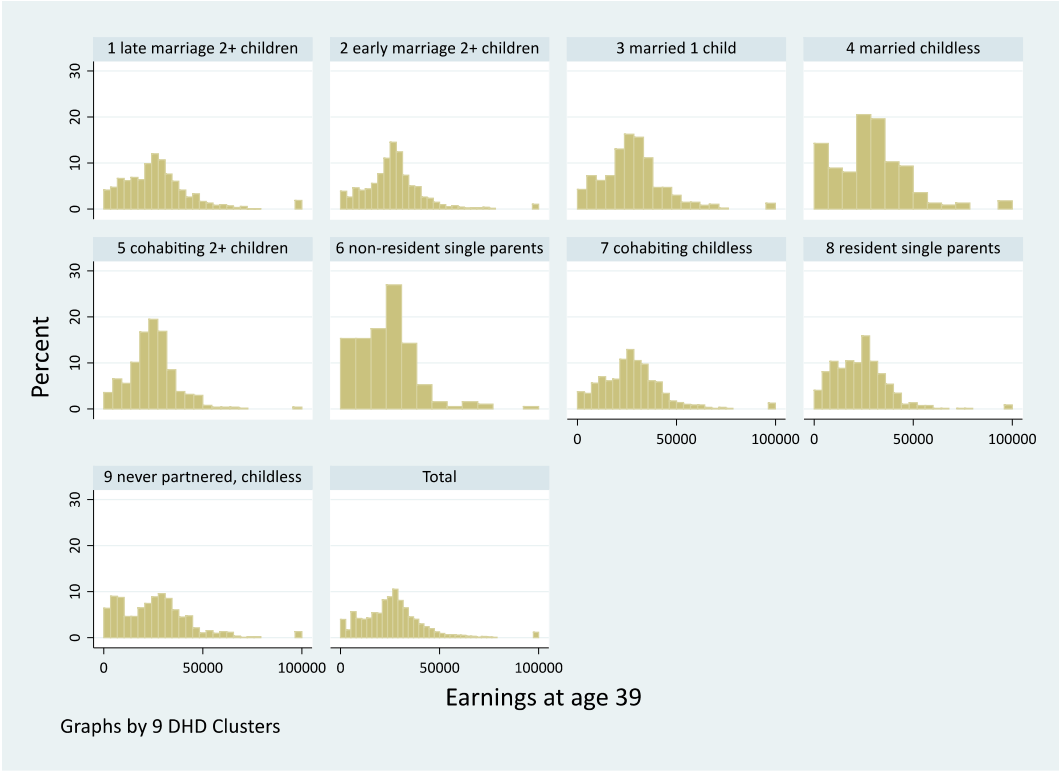


Figure 6: Distribution of men's earnings at age 39 by family pathway

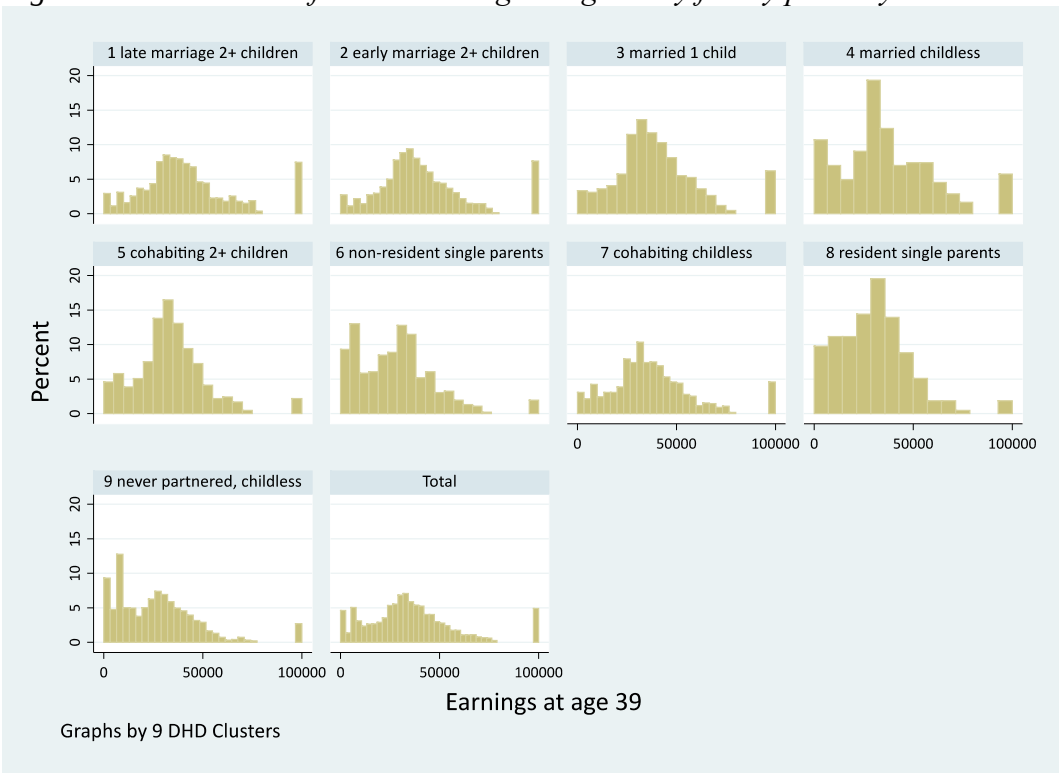


Table 1. Descriptive Information on 9 clusters of "Family pathways"

	1) Late marriage 2+ children	2) Early marriage 2+ children	3) Marriage 1 child	4) Childless marriage	5) Cohabitation 2+ children	6) Childless Cohabitation	7) Single, non-resident parent	8) Single, resident parent	9) Never partnered childless	Total
Percent	14	23	7	4	7	14	5	7	20	100
N	1,911	3,074	890	469	918	1,913	655	892	2,739	13,461
Female (%)	44	59	53	48	55	42	29	76	37	49
Education (%)										
Basic level	12	11	12	13	18	13	27	22	30	17
Voc. secondary	33	37	33	31	47	35	44	43	32	36
Gymnasium	4	3	4	4	4	5	5	5	6	5
Lowest tertiary	18	24	22	22	19	19	10	15	12	18
Lower tertiary	11	11	11	11	7	11	6	8	8	10
Higher tertiary	22	14	18	19	6	18	7	7	11	14
Sequence (mean)										
Complexity	8.6	7.5	7.7	6.7	8.1	8.4	7.6	8.6	2.9	6.7
Distance	170.6	130.4	164.0	113.1	168.1	208.3	154.0	201.2	44.0	222.2

Note: the total average sequence distance includes between cluster distances and is therefore higher than the within cluster averages.

Table 2. Regression models of earnings at age 39 by gender; regression coefficients (B) and standard errors (in parentheses).
Model 1: Only includes the family pathway variable.
Model 2: Model 1 + parental socioeconomic status + place of residence in childhood + raised in single-parent family.
Model 3: Model 2 + educational attainment + age when completed highest education.
Model 4: Model 3 + employment stability early in life + first earnings, logged + age when first employed.

	Men				**Women**			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
Family pathway, ref: 1) Late marriage, 2+ children								
2) Early marriage 2+ children	-412.5	-131.1	1391.6	1246	-384.6	-263.1	1244.3*	1007.1
	(-920.9)	(-904.3)	(-809.1)	(-786.1)	(-672.9)	(-663.8)	(-606.5)	(-590.7)
3) Married 1 child	-1222.7	-1200.4	339.6	302.7	1814.9	1857.3*	2315.7**	2212.9**
	(-1288)	(-1264.8)	(-1129.8)	(-1097.4)	(-948.1)	(-934.8)	(-851.7)	(-829.2)
4) Married childless	-2086.4	-2361.8	-1742.9	-1306.5	2398.4	2191.7	2217.9*	2841.6**
	(-1638.9)	(-1608.9)	(-1435.9)	(-1394.9)	(-1233.2)	(-1216.3)	(-1109.5)	(-1080.6)
5) Cohabiting 2+ children	-8801.2***	-7607.5***	-2923.8**	-1977.3	-3178.0***	-2228.2*	802.2	643.6
	(-1263.3)	(-1242.7)	(-1115.3)	(-1084.9)	(-902.6)	(-892.9)	(-817.8)	(-796.2)
6) Non-resident single parents	-14369.4***	-13313.6***	-8150.4***	-6524.0***	-3598.5**	-2919.5*	341	669.1
	(-1235.6)	(-1216.7)	(-1095)	(-1068.4)	(-1295.3)	(-1278.7)	(-1169.2)	(-1138.8)
7) Cohabiting childless	-5252.4***	-4960.8***	-3441.8***	-2582.2**	758.8	894.7	1233.8	1526.3*
	(-946.7)	(-929.7)	(-830.7)	(-808.1)	(-798.2)	(-787.7)	(-717.7)	(-698.8)
8) Resident single parents	-11589.9***	-10606.1***	-5573.4***	-4558.1**	-3179.4***	-2567.8**	1198.3	1711.0*
	(-1673.5)	(-1644.1)	(-1472.7)	(-1431.9)	(-847.6)	(-837.9)	(-772.4)	(-752.7)
9) "Lone wolves"	-15932.7***	-15064.3***	-11685.1***	-8991.6***	-1515.9	-1475.5	103.8	1441.4*
	(-885.5)	(-870.9)	(-782.3)	(-773.8)	(-789.8)	(-778.9)	(-712.4)	(-701)
Constant	42907.9***	41589.6***	36194.0***	33402.1***	27908.1***	26645.2***	18674.2***	21689.7***
	-679.4	-778.3	-1211.7	-2701.5	-558.8	-624	-994.2	-2118.2
N	6211	6211	6211	6211	5878	5878	5878	5878

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 7. Regression models of annual individual earnings at age 39 by gender; regression coefficients. ref: Late marriage, 2+ children (view in color)

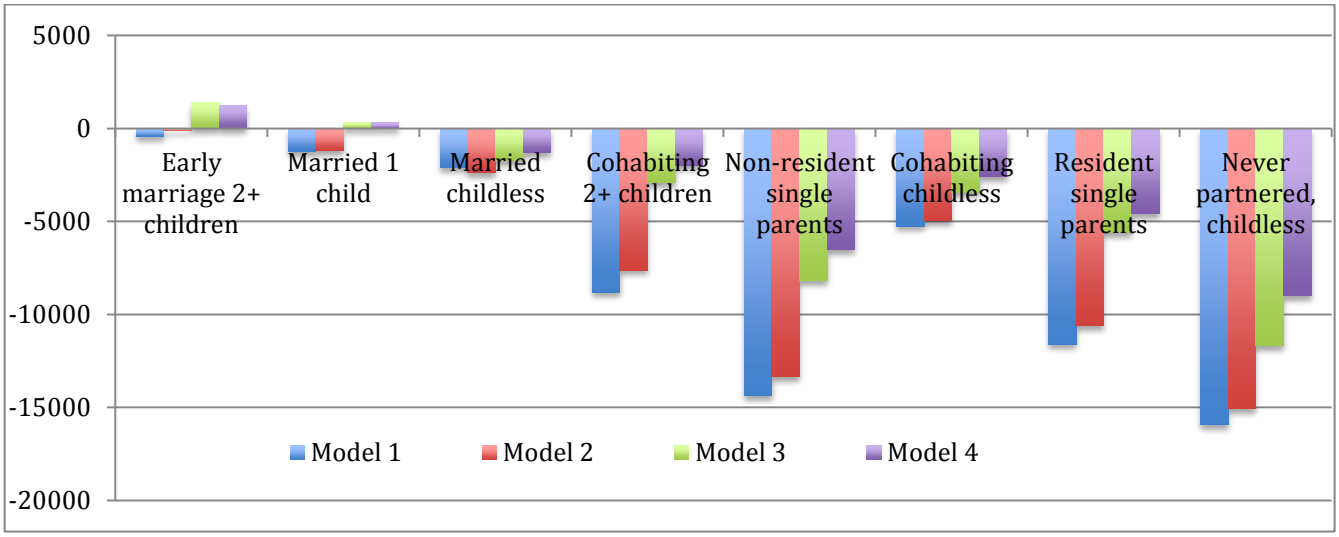
Model 1: Only includes the family pathway clusters

Model 2: Model 1 + parental socioeconomic status + place of residence in childhood + raised in single-parent family

Model 3: Model 2 + educational attainment + age when completed highest education

Model 4: Model 3 + employment stability early in life + first earnings, logged + age when first employed

Men



Women