

Intergenerational Transmission of Gender Segregation

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Abstract

Many western economies have seen a fall in the employment share of the traditionally male-dominated, manufacturing sector, while demand is increasing in female-dominated jobs. Still, men appear reluctant to enter these occupations. To understand persistent labor market segregation, I exploit within-school-across-cohort variation in the gender composition of the occupations of schoolmates' parents, and document that gender segregation is transmitted from one generation to the next. Boys who were exposed to gender-stereotypical male role models enter male-dominated occupations, while those socialized in cohorts with peers whose fathers worked alongside women enter occupations with more women. This effect goes beyond the influence of their father. In general, mothers' labor market behavior has negligible effects on boys. In contrast, girls are mainly influenced by female role models, and compared to boys the effects are much smaller. However, when a larger share of mothers works full-time, gender segregation decreases in the next generation.

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1 Introduction

Despite gender convergences in labor force participation and educational attainment, men and women still tend to work in different occupations. Gender segregation contributes substantially to the gender wage gap as women are over-represented in low-paid professions and under-presented in high-paying professions. Proposed explanations include gender differences in demand for amenities, human capital, discrimination, and gender norms (Cortes & Pan, 2017). However, male-dominated, manufacturing jobs are disappearing in many western economies, and female-dominated sectors are growing (Petrongolo & Ronchi, 2020). While women have entered and altered many previously male-dominated occupations (Goldin (2014); Goldin (2015); Pan (2015)), men appear more reluctant to enter feminized occupations. This highlights the importance of an improved understanding of persistent gender segregation in the labor market. In particular, the notion of masculinity and its related gender norms may impose a potential source of adjustment frictions.

The goal of this paper is to assess whether the occupational choices of role models affect the gender composition of children's occupations as they become adults. Same-sex role models shape what is considered gender-appropriate behavior, and in turn, shape outcomes in adulthood. I explore the role of labor market behavior of relevant role models that children are exposed to during adolescence. Specifically, I look at the occupational choices of parents and parents of schoolmates. The underlying idea is that if a child observes role models working in a less gender-segregated occupation, they are more likely to view this as gender-appropriate compared to a child who observes role models in highly segregated occupations. By using the tools from both the literature on inter-generational mobility and the peer effects literature, I document the effect of labor market behavior of role models on the gender composition of occupations in adulthood.

Labor market outcomes, including occupational choice, are not only influenced by economic opportunities. A large literature is engaged with how the childhood environment affects labor market outcomes. Mothers' labor market participation influences their daughters' and daughter-in-laws' labor market participation (e.g. Goldin & Olivetti (2013); Fernandez et al. (2004); Morrill & Morrill (2013); Fogli & Veldkamp (2011); Farré & Vella

(2013)), and other women in proximity have a similar effect (Olivetti et al. (2018); Fernández (2013); Fogli & Veldkamp (2011)). Father-son associations have received attention in the literature on inter-generational mobility. Both the family and the broader social environment as well as the interaction between the two are important determinants of outcomes (Cholli & Durlauf (2022); Chetty et al. (2014)). Beyond affecting resources, parents and other adults in proximity influence aspirations. If mothers and other women in proximity influence girls' outcomes via transmission of norms, the same may be true for fathers and sons. Importantly, inter-generational aspirations transferred to boys and girls are then likely to be very different.

To investigate how the gender composition of occupations transmits across generations, I use detailed Danish register data covering the cohort born between 1966 and 1974. I construct measures of gender-stereotypical behavior of parents, schoolmates' parents, and wider municipal measures of norms. These measures are intended to capture transmitted norms of the 'appropriate role' of men and women in society and within families. I measure exposure at age 15 and outcomes at age 45. First, I estimate the parent-child associations of the share of women in their occupations separately for boys and girls, and mothers and fathers. Second, I estimate the causal effect from schoolmates' parents' labor market behavior by exploiting quasi-random variation across cohorts within school. The source of variation used to identify effects from exposure to different types of role models is the difference between the child's cohort and the average composition of the school. This accounts for sorting into the school or school district. The main contextual effect of interest is the role of the gender composition of the occupations of schoolmates' fathers, but I also explore the role of the gender composition of the schoolmates' mothers' occupations as well as maternal labor supply.

Combined, my results show that labor market segregation in one generation transmits to the next, while role models acting in counter-stereotypical ways decrease gender segregation in the next generation. In particular, my results highlight the importance of same-sex role models. Within the family, the father-son association of the share of women in their occupations is extremely stable, while mothers have negligible effects on boys. The mother-daughter association is also stable, and 2/3 of the size of the father-son association. Moving

on to the causal estimates, I show that boys who are socialized in cohorts where fathers work in occupations with a relatively high share of women also work in occupations with more women themselves. At baseline, peers' mothers matter less for the gender composition of occupations in the next generation. However, if a relatively high share of peers' mothers works full time, gender segregation decreases. This is driven both by boys entering occupations with more women and by girls entering occupations with fewer women. In this setting, mothers working full time is still uncommon. Thus, mothers behaving in counter-stereotypical ways reduce the labor market segregation of the next generation.

First and foremost, this paper contributes to the literature on gender norms and labor market outcomes, specifically gender segregation. The intergenerational transmission of female labor force participation is well-established. However, little attention has been paid to other aspects of gender stereotypical labor market behavior and to masculinity and related gender norms that may influence men's behavior (Lundberg (2022); Nelson (2016)). Baranov, de Haas, & Grosjean (2021) show that historical rates of skewed sex ratios in Australia increase current-day excess male mortality, violence, and occupational segregation, and decrease tolerance towards sexual and gender minorities. Yet, decreasing segregation in the Norwegian military increases men's acceptance of feminine traits in themselves and gender equality (Dahl et al., 2020). Gender norms have been highlighted as important constraints that distort time allocation, both men's time spent on home production (Bertrand et al. (2015); Siminski & Yetsenga (in press); Ichino et al. (2019)) and men's support for women's labor force participation (Bursztyn et al., 2020). Moreover, men tend to avoid feminized occupations (Pan (2015); Goldin (2015)). The paper contributes to the emerging literature on how gender norms influence men's labor market outcomes. I provide evidence of the transmission of a certain occupation-trait that has been linked to notions of masculinity, namely the absence of women.

Second, this paper adds to the literature on peer effects, specifically the literature that documents the persistence of peer influence on outcomes in the long run. For identification, it is common to exploit idiosyncratic variations across cohorts within the same schools. This approach was pioneered by Hoxby (2000) to study the effect of gender and racial composition in a classroom and has been widely used (e.g. Rivkin et al. (2005); Friesen & Krauth (2007));

Friesen & Krauth (2010); Lavy & Schlosser (2011); Anelli & Peri (2017); Bifulco et al. (2011); Feld & Zölitz (2017); Fruehwirth & Gagete-Miranda (2019); Cools et al. (2022)). This approach identifies a contextual effect (Manski, 1993). Two studies evaluate how same-sex role models and gender stereotypes transmit to the next generation. Olivetti et al. (2018) show that girls in cohorts with more working mothers are more likely to work once they have children themselves. Eble & Hu (2022) document the transmission of beliefs about gender differences in math ability. Exposure to peers' parents who believe that boys are better than girls increases the likelihood that the children hold this belief and harms girls' aspirations and test scores while improving boys' outcomes. Using this approach to exploit quasi-random variation within-schools-across-cohorts, and by constructing measures of gender stereotypical labor market behavior, I document causal transmission of gender segregation from one generation to the next.

Finally, this paper also adds to the literature on inter-generational transmission of occupation choice. Sociologists are the main contributors to this literature, while economists have focused more on the transmission of income (see e.g. reviews by Blanden (2011) and Cholli & Durlauf (2022)). Two papers have documented inter-generational correlations in the gender composition of occupations/education. My results largely resemble the evidence provided by Hederos (2017) who uses Swedish census data for an older cohort. Humlum et al. (2019) use Danish data and a similar period as me and focus on the gender composition of university programs. They focus on women's sluggish entry to male-dominated education programs and find that fathers hardly influence their daughters' occupational choices. I shift the focus to the boys and extend the analysis to all levels of educational attainment, and ask how role models influence boys' entry to female-dominated occupations.

The structure of the paper is as follows. In Section 4.2, I present the data, the measures of gender-stereotypical labor market behavior obtained from observational data, and some descriptive statistics. Section 4.3 contains descriptive evidence of the parent-child associations. Section 4.4 contains a presentation of the empirical approach and identifying assumptions as well as validity checks. Results are reported in Section 4.5. Section 4.6 concludes.

2 Background

This section contains a brief description of the Danish labor market and the schooling system, the data used in the analysis, and some descriptive statistics.

2.1 Setting

While the gender gap in labor market participation is small (approx. 5 %-point), the Danish labor market is still fairly segregated. This is a function of boys and girls choosing different types of education, and sectorial segregation where men tend to work in the private sector and women in the public sector, leading to horizontal segregation (Holt et al., 2006). Moreover, there is substantial vertical segregation with under-representation of women in the upper echelons of even female-dominated fields (Holt et al., 2006). The overall level of segregation in the Danish labor market is almost identical to the average segregation within the EU, and in most countries, segregation has decreased over the last decades (EU-Commission, 2009). To decrease segregation, policymakers have mainly proposed events and programs to increase girls' interest in male-dominated fields, such as STEM and IT, rather than encouraging boys to enter female-dominated fields, such as health care and social work (EU-Commission, 2009).

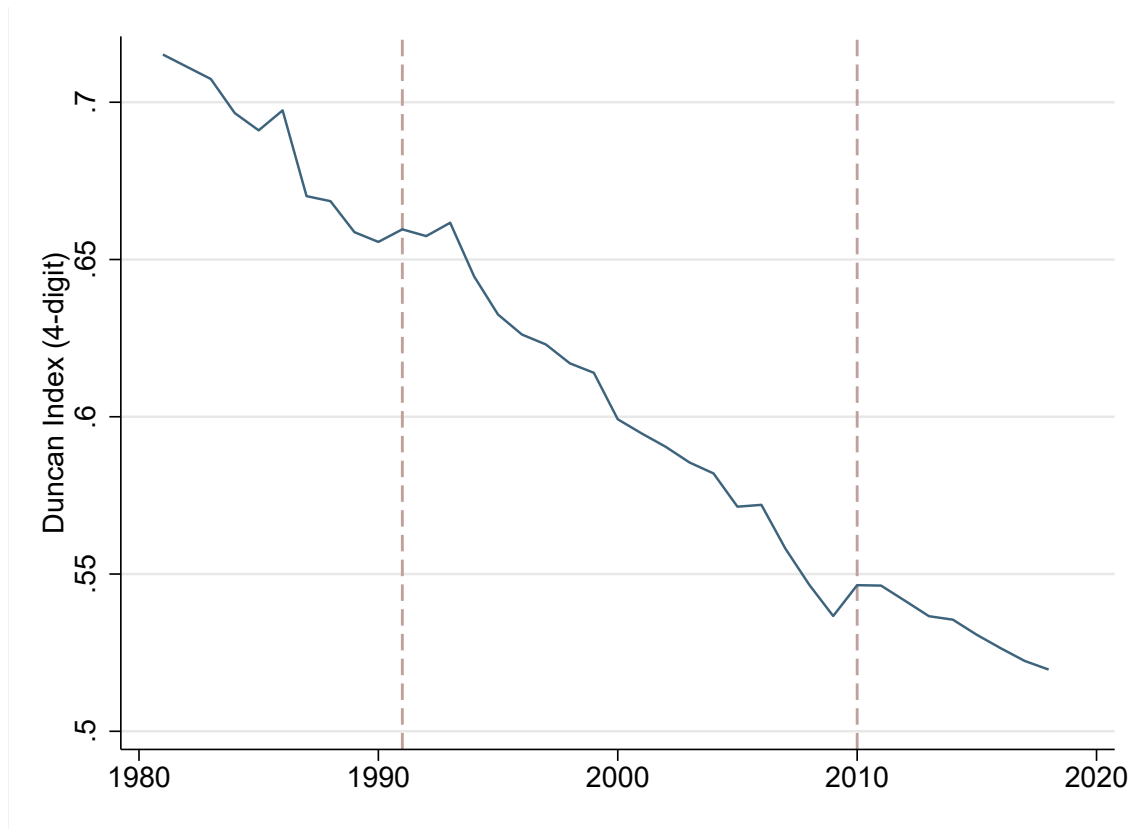
In the '80s — where I measure childhood exposure — the Danish labor market was highly segregated. Measured using a Duncan Segregation Index¹, Figure 1 shows that gender segregation in the '80s and early '90s was between 0.72 and 0.65, which corresponds to the proportion of individuals who would need to change occupation for the labor market to be completely integrated. I measure the outcomes once the focal individual turns 45 — in the 2010s — where the Duncan Index has declined by almost 1/3 to 0.52-0.55.

¹The Duncan-Index identifies the percentage of women (or men) that would have to change occupations for the occupational distribution of the two genders to be equal:

$$DI = \frac{1}{2} \sum_{i=1}^N |m_i/M - f_i/F|$$

where m_i (f_i) is the male (female) population, in occupation i and M (F) are the total male (female) working population of the local labor market. It takes values between 0 (complete integration) and 1 (complete segregation).

Figure 1: Segregation of the Danish Labor Market



Notes: The figure shows the Duncan Index for the Danish labor market. Dashed lines indicate data breaks. The period from 1981-1991 based on NYSTGR at the 4-digit level, and the two latter periods are based on the ISCO at the 4-digit level.

Table 1 contains a list of the most common occupations for men and women, respectively, across the two generations. Starting with the common occupations held by women, it is striking how similar the two lists are. The most common occupation for both generations is office worker, and various types of health and child care feature prominently on both lists. For both men and women in both generations, teacher is a large occupation. For men, transportation staff and various types of construction are very common for both generations. In the 2010s, retail work is the most common occupation for men, despite this being a female-dominated occupation. Self-employed farmer was the second most common occupation in the 80's for men, but this occupation is no longer in the top 10 of most common occupations. Assisting spouse was a common occupation for women in the '80s.

Table 1: Most Common Occupations

Parental generation, 1981-1989					
Men			Women		
Occupation	N	Share	Occupation	N	Share
Transportation staff	61007	0.94	Office worker	195985	0.85
Self-employed, farming	56230	0.95	Domestic help	77019	0.96
Marketing/finance	50081	0.99	Office worker in hospital	66996	0.88
Architect/engineer, manager	36989	0.96	Cleaning staff	50752	0.92
Teacher	35908	0.45	Nurse/x-ray assistant/therapist	49051	0.96
Office worker	34913	0.15	Retail worker	44657	0.65
Bricklayer/carpenter, trained	34818	0.98	Teacher	43889	0.55
Mechanic, trained	32257	0.99	Social worker, untrained	39429	0.91
Construction worker, untrained	29532	0.98	Assisting spouse	30345	0.98
Electrician, trained	29298	0.99	Social worker/pedagogue	25520	0.84

Child generation, 2010-2018					
Men			Women		
Occupation	N	Share	Occupation	N	Share
Retail worker, sales	34630	0.41	Office worker	71475	0.77
Office worker, middle management	28304	0.71	Health care, private homes	67778	0.90
Warehouse and replenishment	27696	0.78	Child care, assistant	55276	0.76
Transport and warehouse	27026	0.80	Nurse	54601	0.95
Carpenter	26744	0.99	Waiters/bartenders	53507	0.86
Teacher	25717	0.33	Pedagogue	51744	0.82
Education, higher edu.	22369	0.33	Retail worker, excl. management	51158	0.59
Construction work	22235	0.92	Teacher	51110	0.67
Truck driver	21368	0.99	Health care, hospitals etc.	46326	0.85
Office worker	21349	0.23	Cleaning staff	45139	0.71

Notes: The table lists the biggest occupation for men and women, respectively, and the number of men and women working in these occupations together with the share of workers of the same sex, based on the full working population. For the parental generation, this is based on NYSTGR, and both the count and share refer to a mean over the period from 1981-1992. For the child generation, this is based on the Danish ISCO codes and covers the period from 2010-2018.

Another important feature of this study is the schooling system in Denmark. For the period of this analysis, nine years of schooling was mandatory. Importantly, there is no distinction between primary and secondary school in Denmark. Unless a family actively decides to change the child’s school, the child stays in the same school from the age of six to the age of 15.² This implies that the cohort composition is fairly stable throughout nine years of schooling. School districts are linked to residential areas. Similar to many other settings, Danish families sort into neighborhoods along important socio-economic dimensions, such as income and education, influencing outcomes for the next generation (Heckman & Landersø (2021); Damm (2014)).

²There are exceptions to this. For example, in the rural parts of the country or on smaller islands it was not unusual to have a small school covering the first years of schooling. When the children reach a certain grade, they would start to commute to a larger school. Moreover, as of 1975, 1-year boarding schools (‘Efterskoler’) were allowed to offer final exams. I drop these schools from my analysis.

2.2 Data

The starting point is the population register containing all inhabitants in Denmark with family identifiers. I focus on the cohorts born between 1966 and 1974 and their parents. Educational registers with school identifiers allow me to identify the children that complete the mandatory schooling together. Having defined the population of interest, I link it to the registers that contain information on labor market outcomes for all workers in Denmark since 1981. In combination with a widely used measure of gender norms, namely maternal labor supply, I measure gender segregation of the parental generation to construct measures of gender norms that the focal individuals are exposed to in their adolescence (i.e. at age 15). I obtain these measures at the family level, at the school, and at the municipal level. At the municipal level, I use a Duncan Index, and for the parents and schoolmates' parents, I measure the share of women in the occupation cell.

I restrict the sample to exclude those with migrant background, defined as either born outside Denmark or with at least one parent born outside Denmark. Most of this is mechanical, as I need the children to reside with their parents in Denmark at age 15. Moreover, I do not want my results to be affected by discrimination in the labor market and other issues related to integration, so the remaining children with migrant background are also dropped.³ I also exclude those where at least one parent is self-employed.⁴ For self-employed, measures of labor supply (and potentially wages) are of poor quality, and if one parent is self-employed whether or not the other parent is assisting is unclear.

2.2.1 Outcome of Interest

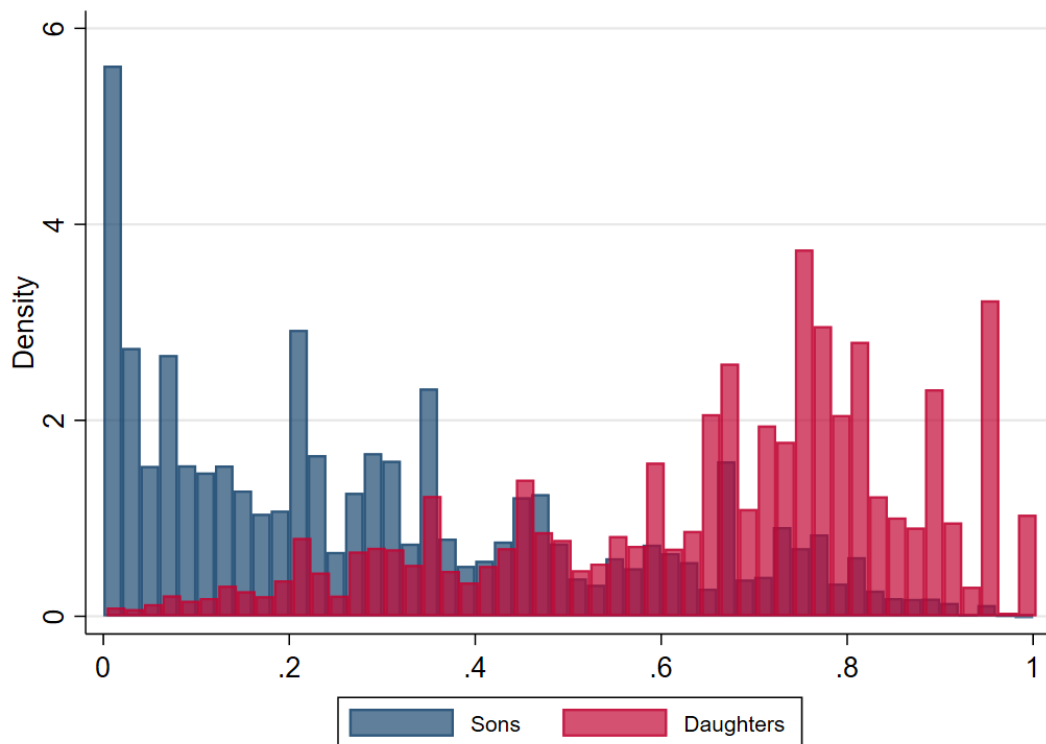
The outcome of interest is obtained when the focal person is 45 years old. This age is chosen to ensure important labor market and family decisions have been made and to avoid any data breaks for measures of labor market outcomes. I measure the gender composition

³In 2010, 9.5 % of the population have migrant background. In 2018, this number is 14 %.

⁴A literature has shown that entrepreneurial parents have entrepreneurial children (e.g. [Lindquist et al. \(2015\)](#); [Dunn & Holtz-Eakin \(2000\)](#); [Nicolaou & Shane \(2010\)](#)), with stronger associations across same-sex parent-child pairs. In the early '80s, approx. 25 % of the children are living in households where at least one parent is self-employed. This number gradually decreases to 21 %.

of the occupation of the focal person as the share of women in the occupation (similar to [Humlum et al. \(2019\)](#) for education and [Hederos \(2017\)](#) for occupation). I use the Danish ISCO-codes to identify the occupation and calculate the share of women at the four-digit level. In Figure 2, I show the distribution of the female share in the occupation that individuals work in at age 45 for both men and women. Confirming the picture from Figure 1, the Danish labor market is fairly segregated even for the most recent year. The median share of women in the son's occupation is 23.9 %, and for daughters this number is 72.2 %.

Figure 2: Distribution of Female Share in Occupation at age 45, by Gender



Notes: The figure shows the distribution of the share of women in the occupation of the focal individuals. Occupations are inferred from the Danish (D)ISCO-codes and the gender share is calculated at the 4-digit level. Self-employed individuals and assisting spouses are excluded.

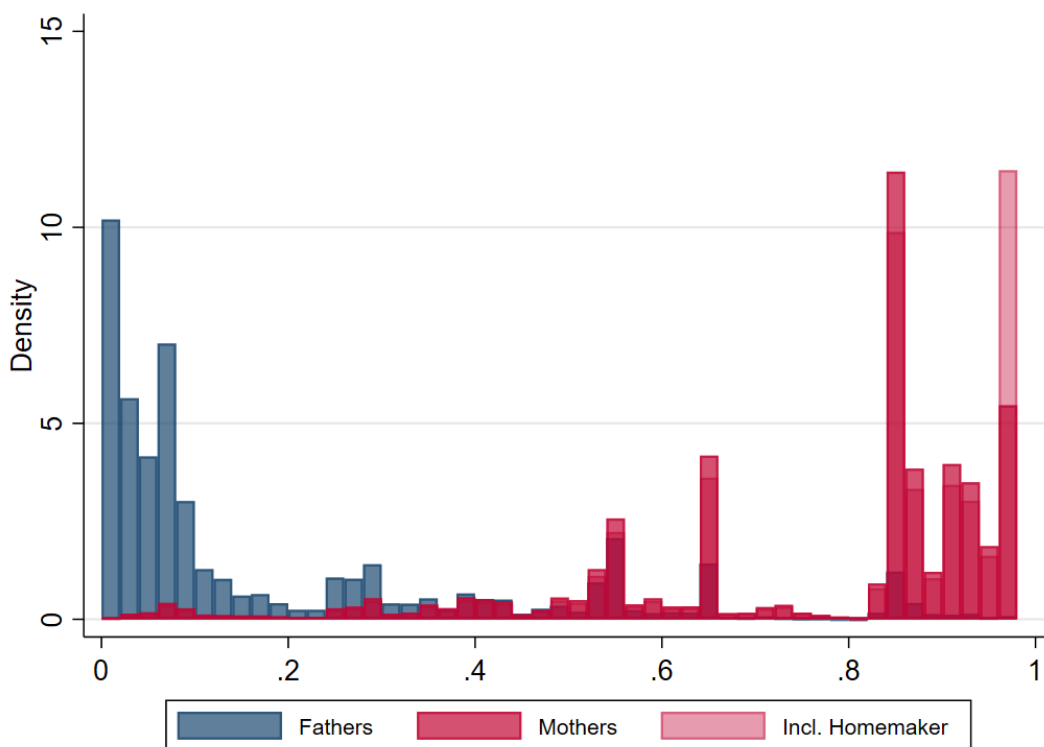
2.2.2 Gender Composition of Occupation

The gender composition of the parents' occupation is defined as the share of women in the occupation. The occupation cells are constructed by Statistics Denmark from a combination of union membership, education, and sectorial occupation. The occupational classification has a hierarchical structure, allowing for analyses at different levels of detail. I conduct the

analyses at the most detailed level, using four-digit codes. At higher levels of aggregation, predominantly male or female occupations may be combined and appear as integrated. This approach follows [Hederos \(2017\)](#).

I modify the parents' occupational classifications in two ways. First, I ensure that the set of occupations is consistent over time. Some very small occupations cease to exist in the late '80s. Vice versa, new occupations arise in the latter part of the period. For these occupations, all with less than 80 workers each year, I collapse them with the one of their neighboring occupations, which has the most similar gender composition. Second, I classify homemakers (women with no labor supply and thus no occupation) as a separate occupation taking the same value as the most female-dominated occupation in a given year.⁵

Figure 3: Gender Composition of Parental Occupations



Notes: The figure shows the distribution of women in the fathers' and mothers' occupations, respectively. This is measured when the focal person is 15 years old. Occupation is inferred from the variable NYSTGR which Statistics Denmark construct from a combination of education, sectorial employment, and union membership, using the most detailed level (4-digits). Self-employed parents and assisting spouses are excluded. The fraction of women in the mothers' occupation is shown in red and pink (excluding and including homemakers, respectively), and the fraction of women in the fathers' occupation is shown in blue.

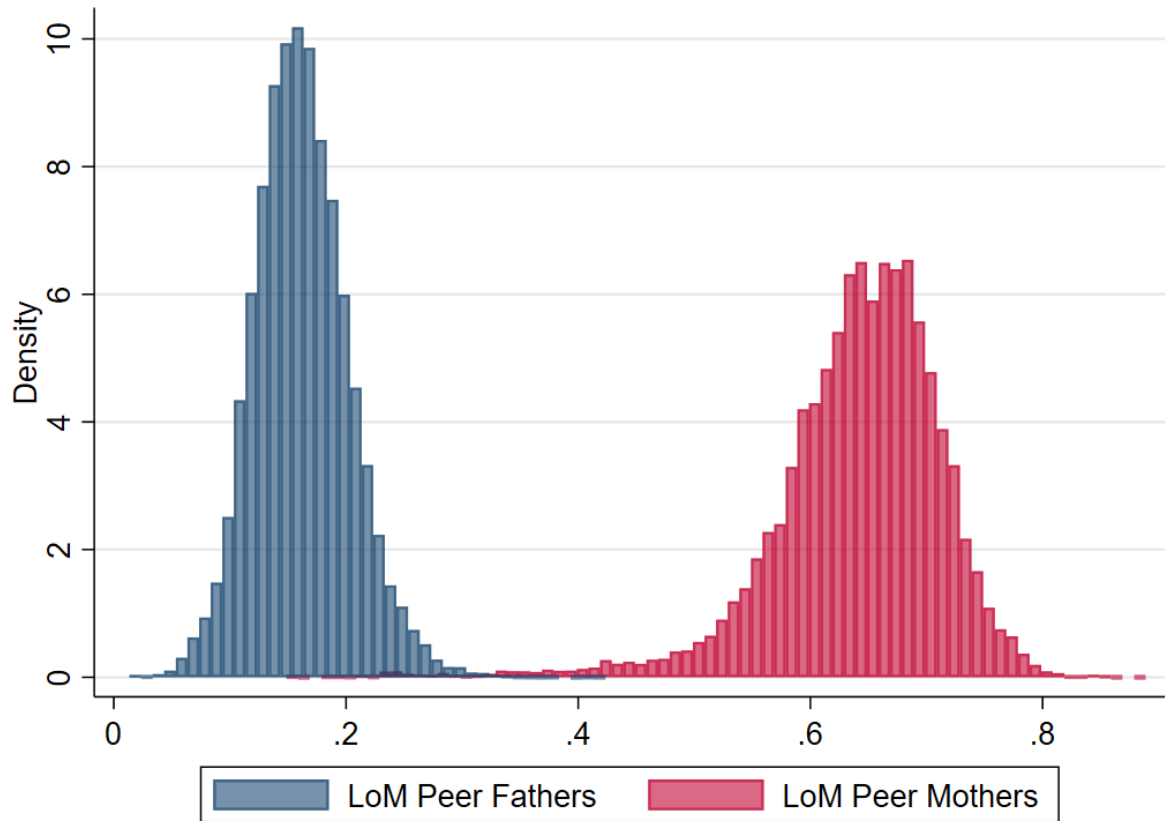
⁵Throughout the period, the share of mothers with a labor supply of zero decreases from 20 % to 12 %. The share of mothers that work full time increases from 22 % to 38 %.

The distribution of the measure of parents is depicted in Figure 3 and shows a highly segregated labor market. More men than women work in occupations without or with very few people of the opposite gender present. 10 % of fathers work in occupations with virtually no women, and 6 % of mothers work in occupations almost without any men. However, when including homemakers as occupation, this number increase to 12 % for women. The median father works in an occupation with 7.0 % women. Thus, it is fairly common to have a father in a heavily male-dominated occupation. The average share of women in the fathers' occupation is 19.3 %. The mothers also work in highly segregated occupations but are more likely to have at least some men present in their occupations. The median mother works in an occupation with 84.5 % women. While the median is unchanged when adding homemakers, the average share of women in mothers' occupations increases from 75.6 % to 77.3 %.

Moving on to the school environment, I calculate the leave-out-mean of the gender composition of fathers and mothers of the cohort members at the school from which they finish 9th grade.⁶ That is, for each student, this measure captures the gender composition of the occupation of the fathers and mothers, computed from the school-cohort distribution after eliminating the student from the distribution. The distribution of the leave-out-means is depicted in Figure 4. Fathers work in more segregated occupations than mothers. The average leave-out-mean of the share of women in the occupation of the schoolmates' fathers is 16.2 % and the corresponding number for mothers is 64.0 %, with very similar medians. Including homemakers returns a distribution that is shifted to the right and with a larger variance.

⁶I drop the 2 % most segregated schools (cut-off at 33 % and 75 % girls), boarding schools, cohorts with less than 22 students, and those with more than 90 students, corresponding to the 5th and 95th percentile. I create a balanced set of schools, dropping approx. 6.9 % of individuals who are attending schools that do not exist throughout the period.

Figure 4: Gender Composition of Peers' Parents' Occupations

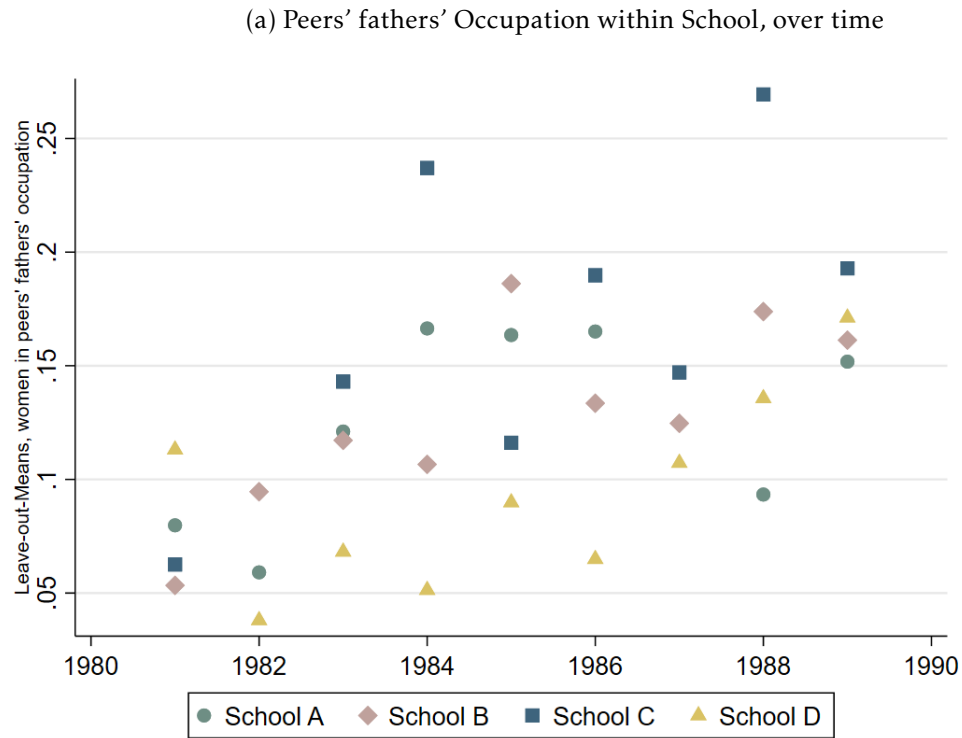


Notes: The figure shows the distribution of the Leave-out-Means of women in the occupation of the schoolmates' parents. This is measured when the focal person is 15 years old. Occupation is inferred from the variable NYSTGR which Statistics Denmark construct from a combination of education, sectorial employment, and union membership, using the most detailed level (4-digits). The fraction of women in the mothers' occupation is shown in red and the fraction of women in the fathers' occupation is shown in blue.

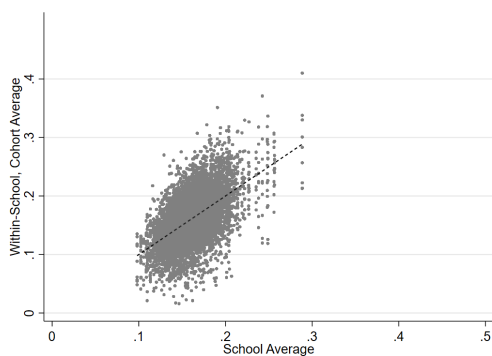
There are two sources of variation in the gender composition of the parents' occupation, one, differences between schools, and two, differences within-school across-cohort, with the latter being the level of comparison used for identification. Figure 5 shows how the measure of the gender composition of the occupation of schoolmates' parents varies within a school. In panel (a), I plot 4 schools and show the yearly measure of gender segregation of the fathers' occupations. For all these schools, there is a positive trend, in line with a general decline in segregation in the labor market reported in Figure 1, but substantial variation around the trend. This is the variation that I use for identification. In panels (b) and (c), I plot the school average on the x-axis against the within-school-year average on the y-axis and overlay a 45-degree line. Each point's distance from the line shows the within-school-

year variance in the gender composition of the occupation of fathers (panel b) and mothers (panel c). The within-school across-cohort corresponds to approx. 75 % of the variation in the gender composition of both mothers' and fathers' occupations. This is reassuring for the likelihood of obtaining useful estimates and for interpretation.⁷

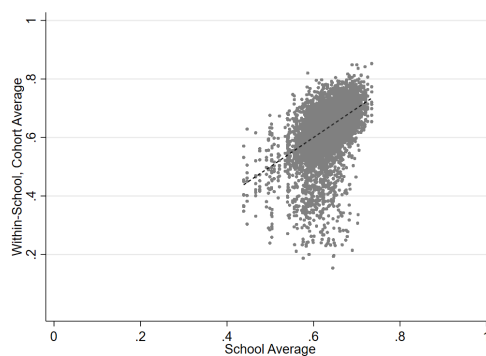
Figure 5: Gender composition of the occupations of Schoolmates' Parents: School average and within-school-year average



(b) Father's Occupation



(c) Mother's Occupation



Notes: The school average of the gender composition of the occupations of schoolmates' parents is plotted on the x-axis against the within-school-year average on the y-axis.

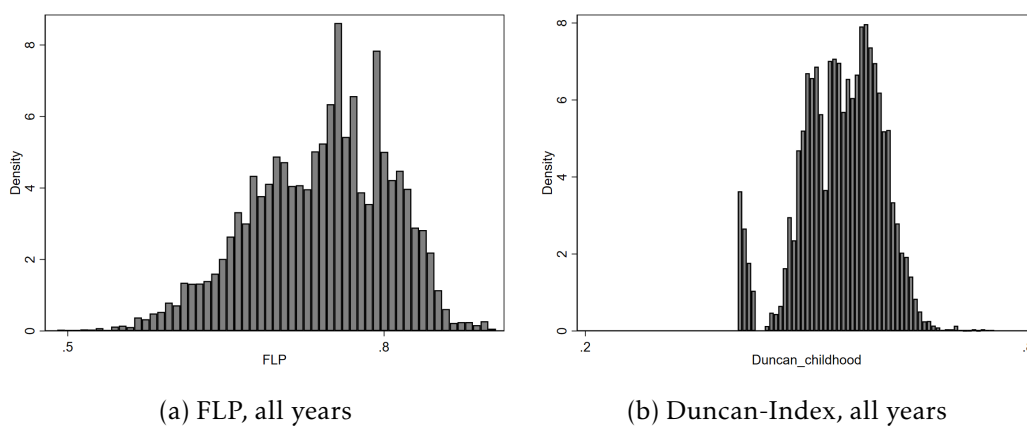
⁷If this share had been smaller, i.e. a larger share coming from differences across schools, the interpretation would likely rely on out-of-sample predictions.

2.2.3 Controls

I obtain a wide range of control variables to capture cohort, region, and family characteristics that may jointly affect parental labor market behavior and the behavior of the focal person. As with the measures of gender norms, all family and parental controls are measured at age of 15 of the focal person and reported in Table 2. A continuous measure of maternal labor supply is constructed from mandatory pension scheme contributions, ATP. From this, I can infer the fraction of full-time work. Throughout the period of analysis, non-participation among mothers fall from 20 to 12 %. The average labor supply increases from 56 % of full time to 69 % of full time and the share of mothers working full-time increases from 22 to 38 %. Moreover, I obtain measures of sibling parity, the number of siblings, sibling sex composition, both parents' age, parent's marital status, educational attainment of both parents, fathers' labor supply, and household income.

At the municipal level, I construct two measures. The first measure is a measure of female labor force participation, defined as the share of women between 18-65 who are working (excl. students). The second measure is a Duncan-Index. The Duncan-Index identifies the percentage of women (or men) that would have to change occupations for the occupational distribution of the two genders to be equal. It takes values between 0 (complete integration) and 1 (complete segregation).

Figure 6: Female Labor Force Participation and Duncan-Index, Childhood Municipal



Notes: The left side of the panel shows the distribution of female labor force participation in the municipal at age 15 of the focal person. The right side of the panel figure shows the distribution of the Duncan-Index of the municipal measured at the same time. The municipal measure of female labor supply includes all women of working age, and the Duncan-Index is based on all workers, regardless of age.

2.3 Descriptive Statistics

In Table 2, I report the mean and standard deviation of the proposed measures of gender norms and other family covariates, separately for boys and girls. The left side reports the measures of gender norms and shows that background measures are very similar across boys and girls. I also report the gender composition of the occupations these children work in once they reach adulthood. As expected, there is a large difference. At the age of 45, the men work in occupations with 34.5 % women, while women work in occupations with 62.9 % women. Gender segregation has decreased substantially compared to the parental generation, where mothers on average worked in occupations with 75 % women and fathers worked in occupations with on average 19.3 % women.⁸ Humlum et al. (2019) report 42.6 % women in sons' university programs, and 70 % women in daughters' programs, returning an almost identical gap. They report 2/3 women in mothers' education and 1/3 women in fathers' education. Comparing my numbers to those reported by Humlum et al. (2019) suggests that in the parental generation, university-educated parents worked in more gender-segregated occupations than the rest of the population, but amongst the children, university-educated individuals are working in less gender segregated occupations.

For other control variables, there is a statistically significant difference across boys and girls. However, these numbers are almost all so small that they are economically meaningless. There is one exception to this - the boys have fathers with slightly more educational attainment, namely more likely to have a father with high education and less likely to have fathers with a high school diploma or less educational attainment.

⁸In Appendix 4A, I report the correlations across the family, school, and municipal measures of gender norms. There is little correlation across family and municipal levels as well as across family and school levels. School and municipal measures correlate substantially. This is not surprising as school districts are embedded within municipals.

Table 2: Gender Norms and Controls, Boys and Girls

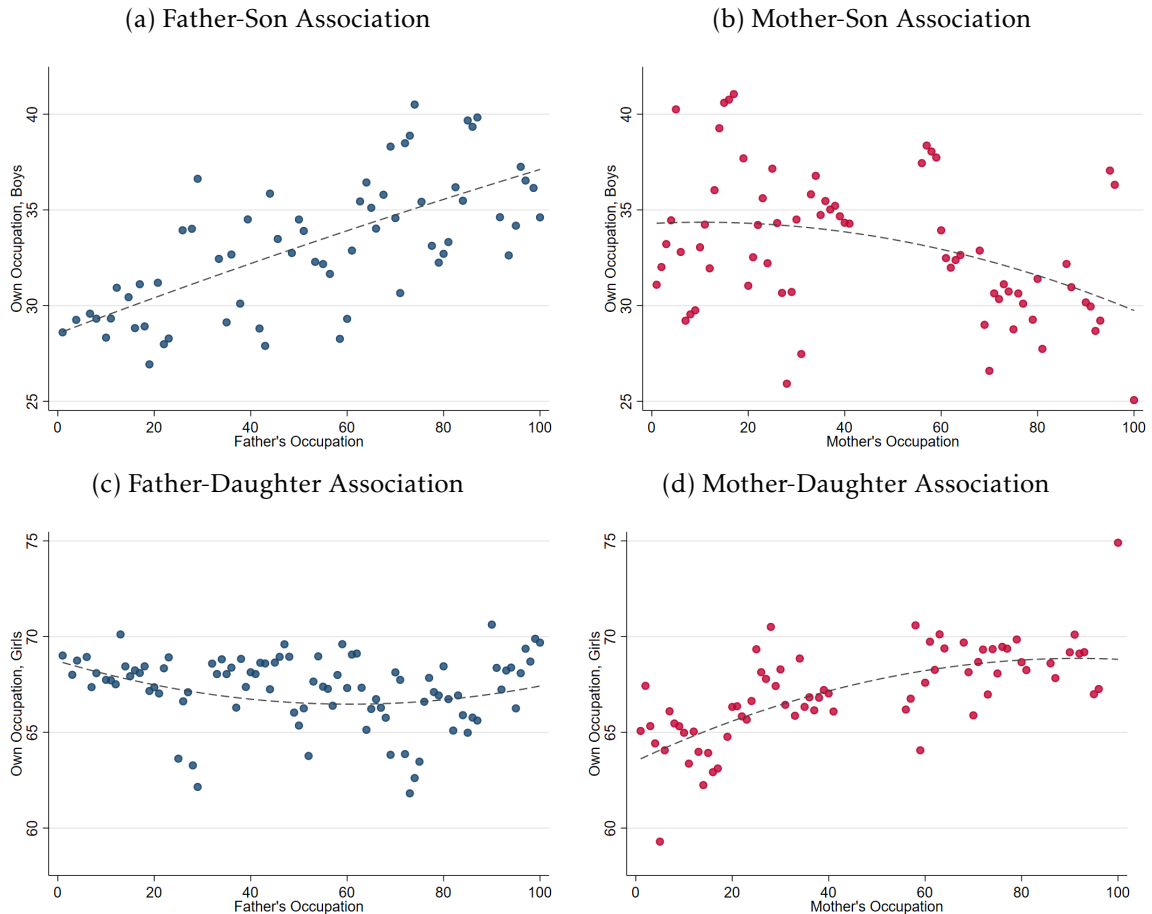
	Gender Norms				Controls		
	Girls	Boys	Dif		Girls	Boys	Dif
Own occupation	0.629 (0.212)	0.345 (0.231)	-0.284*** (0.001)	Birth year	1969.9 (2.612)	1969.9 (2.607)	-0.029*** (0.010)
Leave-out-mean, peers' fathers' occ.	0.164 (0.041)	0.163 (0.041)	-0.000 (0.000)	Siblings	1.422 (0.908)	1.427 (0.897)	0.005 (0.004)
Leave-out-mean, peers' mothers' occ.	0.640 (0.075)	0.641 (0.074)	0.001*** (0.000)	Same-sex sibling =1	0.545 (0.498)	0.544 (0.497)	-0.001 (0.002)
Leave-out-mean, maternal labor supply	536.852 (112.814)	536.327 (113.007)	-0.525 (0.442)	Child parity	1.737 (0.861)	1.733 (0.853)	-0.004 (0.003)
Leave-out-mean, working mother =1	0.733 (0.112)	0.733 (0.112)	0.000 (0.000)	Household inc. (DKK)	277.615 (129134)	278.383 (128601)	768 (505)
Own father's occ.	0.194 (0.240)	0.193 (0.240)	0.001 (0.001)	Inc % earned by Father	0.658 (0.227)	0.660 (0.227)	0.003*** (0.001)
Own mother's occ.	0.755 (0.225)	0.755 (0.224)	-0.001 (0.001)	Fathers' edu., =1 high school or less	0.322 (0.467)	0.315 (0.465)	-0.007*** (0.002)
Own mother's labor supply	614.584 (365.795)	613.756 (365.389)	-0.829 (1.432)	Father's edu., =1 vocational edu.	0.458 (0.498)	0.459 (0.498)	0.000 (0.002)
Own mother =1 if working	0.836 (0.370)	0.836 (0.370)	0.000 (0.001)	Father's edu., =1 higher edu.	0.205 (0.404)	0.212 (0.409)	0.007*** (0.002)
Duncan Index in Childhood	0.700 (0.048)	0.700 (0.048)	0.000 (0.000)	Father's birth year	1941.4 (6.007)	1941.3 (5.985)	-0.107*** (0.023)
Female LFP in Childhood	0.830 (0.038)	0.830 (0.038)	-0.000 (0.000)	Mother's birth year	1944.1 (5.280)	1944.0 (5.240)	-0.094*** (0.021)
Observations	132,779	128,128	260,907	Observations	132,779	128,128	260,907

The sample includes individuals of Danish ancestry born between 1966-1974, excl. self-employed parents and children. Measures are obtained at age 15 except for own occupation, which is measured at the age of 45. Leave-out-means are the measures from the schoolmates' parents. Occupation refers to the share of women in the occupation cell, using NYSTGR from DST, for the parents' occupation and 4-digit Danish ISCO for their own occupation. The municipal measure of female labor force participation includes all women between 18-65, excl. students. The Duncan-Index is based on all workers, regardless of age. *** p<0.01, ** p<0.05, * p<0.1

3 Inter-generational Correlations

Before moving on to the causal set-up, I document the father-child and mother-child associations in the gender composition of the occupations. I first provide graphical evidence, followed by regressions with rich family controls. These estimates should be interpreted as partial correlation. Keeping this in mind, the returned correlations are extremely stable to progressively adding control. The association is stronger for same-sex parents and generally confirms the idea of intergenerational transmission of labor market segregation. I directly show that they are not driven by those pairs that obtain the exact same education.

Figure 7: Share of Women in Occupation, Rank-Rank Associations



Notes: For each percentile of bin of share of women in the parents' occupation, the expected rank of the share of women in the child's occupation is plotted.

Figure 7 depicts the inter-generational correlation in the rank of the share of women in the occupation, going from the most to the least male-dominated. The higher rank (i.e. a higher share of women in the occupation) of occupation of the father, the higher rank of the occupation of the son. The association between mothers and sons is weaker and negative, i.e. having a mother who works in a female-dominated occupation is associated with working in an occupation with fewer women. There is a positive association between mothers and daughters, but no association between fathers and daughters.

To obtain the inter-generational correlations, I estimate the following equation separately for boys and girls:

$$GO_{i,t+1,m} = \beta_0 + \beta_1 GO_{i,t}^{Mom} + \beta_2 GO_{i,t}^{Dad} + \beta_3 X_{i,t} + \lambda_t + \lambda_m + \epsilon_{i,t,m} \quad (1)$$

The outcome $GO_{i,t+1,m}$ denotes the gender composition of the occupation, specifically the share of women in the occupation, for individual i measured in time $t + 1$ (age 45) and grew up in municipal m . $GO_{i,t}^{Mom}$ and $GO_{i,t}^{Dad}$ denote the gender composition of the occupation of the mother and father, respectively, when the child is 15 years old. The coefficients β_1 and β_2 reflect the mother-child and the father-child inter-generational correlations in the gender composition of occupation, respectively. Following the literature, I have standardized these measures (i.e. subtracted the mean and divided by the standard deviation) to obtain coefficients that are easier to interpret as an increase of one standard deviation. $X_{i,t}$ is a vector that contains family co-variates (maternal labor supply, sibling composition, fathers' education, log(household income), parents' birth year, fathers' labor supply).

Table 3 reports the results from Model 1 with controls added progressively. The first panel contains the result for parent-son associations, and the second panel contains the parent-daughter associations. The first column reports the result for the same sex-parent-child correlation without any controls and thus the estimate corresponding to Figure 7.

Parent-child associations are reported in Table 3 and are remarkably stable across specifications. The associations confirm both the idea of intergenerational transmission of labor market segregation and the idea and that same-sex parents matter more. Moreover, the father-son association is hardly affected by adding mother-son measures. Adding mater-

nal labor supply hardly influences the associations either. This suggests that fathers' labor market behavior influences boys independently of maternal labor market behavior.⁹

For all specifications, the father-son association in the share of women in the occupation is positive and highly significant, and the coefficient does not vary substantially when I progressively add controls. The point estimate of mother-son association is negative for all specifications. This is consistent with the hypothesis that boys growing up with fathers (mothers) in more feminized occupations are more (less) likely to enter feminized occupations themselves. However, the magnitude of the effect of the father is much larger than the effect of mothers. An increase in one standard deviation of the share of women in the father's occupation is associated with 2.2-1.7 % more women in the son's occupation from a baseline of 34.5 % women, an effect size of 5 %. In comparison, one standard deviation (correspond to 22.4 %) increase in the share of women in the mother's occupation has a tenfold smaller effect.

The mother-daughter association is positive. This is again consistent with the hypothesis that girls growing up with mothers in feminized occupations are more likely to enter feminized occupations. The size of this coefficient is approximately half of the size of the father-son association. An increase in one standard deviation (corresponding to 22.4 %) is associated with 1.2-0.9 % more women in the daughter's occupation, from a baseline of 63 %. Finally, the father-daughter association is also positive. One standard deviation increase in the share of women in the father's occupation increases the share of women in the daughter's occupation with 1/4 of the mother-daughter association.

⁹In my preferred specification, I exclude mothers who are homemakers, but adding these families with the modification outlined above hardly influences the coefficients. This is reported in Appendix 4B.

Table 3: Inter-generational Correlations

Sons	(1)	(2)	(3)	(4)	(5)	(6)
<i>GO^{Dad}</i>	0.0224*** (0.00114)	0.0225*** (0.00115)	0.0171*** (0.000790)	0.0172*** (0.000796)	0.0170*** (0.000802)	0.0171*** (0.000810)
<i>GO^{Mom}</i>		-0.00590*** (0.000841)	-0.00185** (0.000599)	-0.00191** (0.000611)	-0.00151** (0.000596)	-0.00189** (0.000586)
MLS, [1/2;full-time]					-0.00645** (0.00223)	
MLS, <1/2 time					-0.000587 (0.00204)	
MLS, continuous				-8.32e-06** (2.87e-06)		-7.90e-06** (2.86e-06)
Constant	0.284*** (0.00299)	0.284*** (0.00310)	0.447*** (0.0583)	0.416*** (0.0619)	0.421*** (0.0621)	0.420*** (0.0730)
Observations	145,793	125,649	125,649	125,649	125,649	125,229
R-squared	0.023	0.025	0.048	0.048	0.049	0.049
Daughters	(1)	(2)	(3)	(4)	(5)	(6)
<i>GO^{Dad}</i>		0.000319 (0.000570)	0.00267*** (0.000584)	0.00250*** (0.000592)	0.00255*** (0.000588)	0.00257*** (0.000594)
<i>GO^{Mom}</i>	0.0123*** (0.000585)	0.0125*** (0.000573)	0.00980*** (0.000682)	0.00988*** (0.000682)	0.00966*** (0.000669)	0.00990*** (0.000704)
MLS, [1/2;full-time]					1.10e-05 (0.00105)	
MLS, <1/2 time					-0.00590*** (0.00135)	
MLS, continuous				1.17e-05*** (2.36e-06)		1.14e-05*** (2.41e-06)
Constant	0.607*** (0.00329)	0.607*** (0.00322)	0.930*** (0.0352)	0.974*** (0.0360)	0.981*** (0.0371)	0.943*** (0.0751)
Observations	148,227	124,444	124,444	124,444	124,444	124,057
R-squared	0.013	0.013	0.021	0.021	0.021	0.021
Municipal	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Family			Yes	Yes	Yes	Yes
Siblings						Yes
Municipal norms						Yes

Notes: The sample includes individuals of Danish ancestry born between 1966-1974. Estimates obtained from estimating Equation 1, separately for boys and girls. See above for a full list of covariates. Measures of maternal labor supply is obtained from mandatory pension contributions. Using a discrete measure of maternal labor supply, the baseline category is full-time work. SE clustered at birth year, *** p<0.01, ** p<0.05, * p<0.1

The size of the parent-child coefficients decreases when I add family control in Column (3). This is driven by paternal educational attainment. Adding maternal labor supply (Columns (4) and (5)) hardly alters the coefficients. Column (6) adds control for sibling characteristics (number of siblings, parity, and a dummy for having a same-sex sibling) and municipal-wide measures of gender segregation and female labor supply.¹⁰

¹⁰In an alternative set of specifications, I use ranks. This is reported in Appendix 4C. The results are qualitatively similar. One increase in the rank of the father (mother), increases the rank of the son by 0.0663 (-0.0148) while one increase in the rank of the mother (father) increases the rank of the daughter by 0.401 (0.0406).

Overall, the pattern of my results mirrors those reported in the existing literature. Associations in labor market outcomes between father-son and mother-daughter are consistently stronger than father-daughter and mother-son associations, and effects are larger for sons than for daughters (Cholli & Durlauf, 2022). This is also true for the gender composition of education and occupation (Humlum et al. (2019); Hederos (2017)). The size of the coefficients reported here is very similar to what Hederos (2017) reports for a slightly older Swedish cohort. Using gender composition of university programs, Humlum et al. (2019) report larger estimates.

To understand the role of educational attainment, I estimate Equation 1 separately for families where the fathers have little formal education, vocational training, and those with at least a two-year college degree. In Table 4, I show that the association is stronger in families where the father has a college degree.

Table 4: Heterogeneity by Paternal Educational Attainment

	Boys High School or Less (1)	Girls (2)	Boys Vocational (3)	Girls (4)	Boys At Least Some College (5)	Girls (6)
GO^{Dad}	0.0123*** (0.00142)	0.00127 (0.00144)	0.0162*** (0.00127)	0.00109 (0.000822)	0.0218*** (0.00186)	0.00680*** (0.00148)
GO^{Mom}	-0.000899 (0.00119)	0.00842*** (0.00144)	-0.000306 (0.00148)	0.00827*** (0.00113)	-0.00626*** (0.00113)	0.0113*** (0.00108)
MLS, continuous	-7.25e-06 (5.44e-06)	9.24e-06*** (2.47e-06)	-1.26e-05*** (3.71e-06)	1.36e-05** (4.37e-06)	-5.73e-06 (6.23e-06)	1.18e-06 (8.07e-06)
Constant	-0.259** (0.0859)	0.683*** (0.178)	0.0536 (0.156)	1.113** (0.180)	0.683*** (0.185)	1.129*** (0.201)
Observations	35,168	34,647	58,924	58,571	29,236	28,945
R-squared	0.039	0.021	0.028	0.015	0.044	0.042
Municipal	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Family	Yes	Yes	Yes	Yes	Yes	Yes
Siblings	Yes	Yes	Yes	Yes	Yes	Yes
Municipal Norms	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The sample includes individuals of Danish ancestry born between 1966-1974. Estimates obtained from estimating Equation 1, separately for boys and girls, split by paternal educational attainment. See above for a full list of covariates. Standard errors clustered at birth year. Standard errors clustered at birth year, *** p<0.01, ** p<0.05, * p<0.1

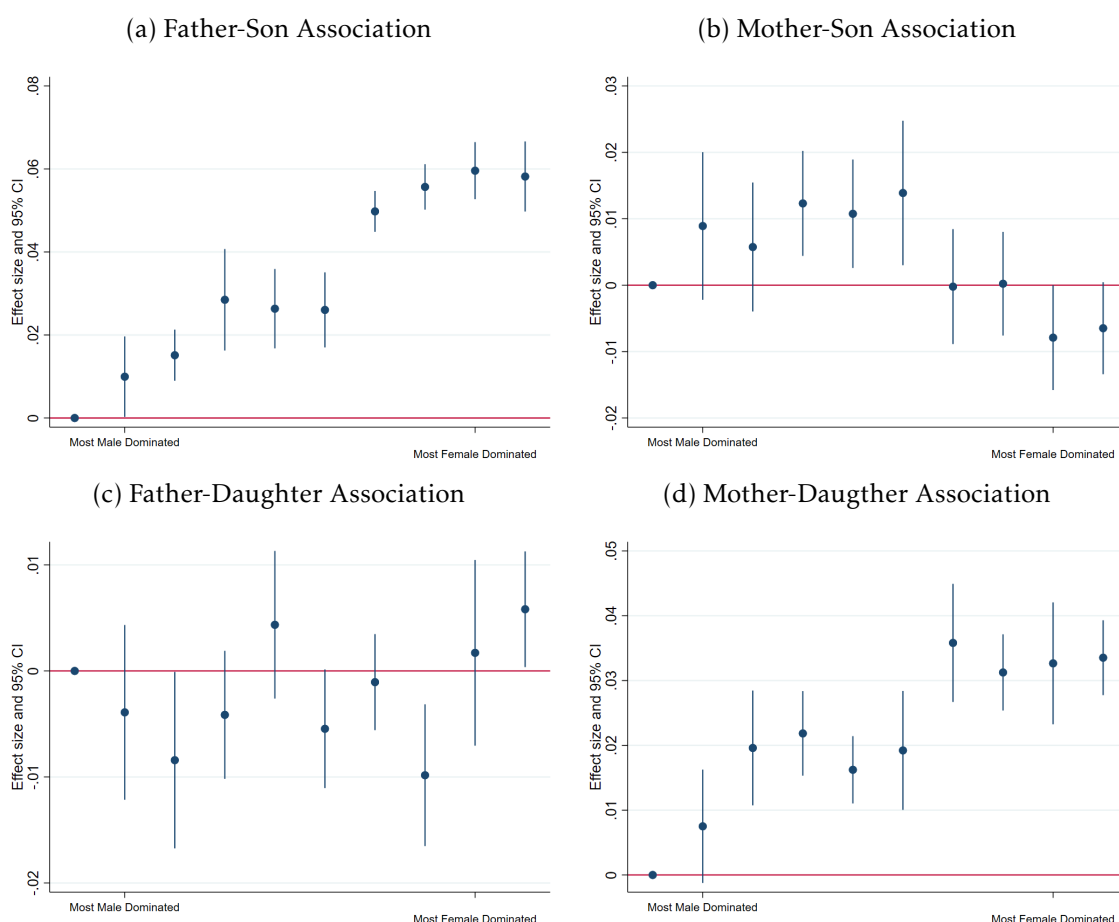
For sons with fathers who have at least some college, the association in the fully specified model is 0.0218, while the corresponding estimate for those with vocational training or less schooling is 0.0162 and 0.0123, respectively. For all groups, these effects are highly significant. For boys, the effects of the gender composition of mothers are insignificant across all groups. For girls, the father-daughter association is only significant in families where the father has a college degree, and the size is 1/3 of the father-son coefficient. The mother-daughter association is also strongest in families with highly educated fathers, with a coefficient of 0.0113, compared to a coefficient of 0.00827 and 0.00842 amongst those with fathers with less education.¹¹

A large literature in sociology documents the transmission of occupations from father to son. If fathers and sons work in the same field, and the gender composition hardly changes, this could drive my results. There is no consistent occupation code covering 30 years, so I use educational codes (indicating the school and the field/major) and drop the parent-child pairs that obtain the exact same education. This is reported in Appendix 4E. While the new point estimates decrease slightly, the overall pattern remains unchanged.¹²

¹¹In Appendix 4E, I report heterogeneity by maternal educational attainment. For girls, the association is strongest in families where mothers have at least some college with an association of 0.0145, compared to 0.00681 and 0.00927 for those with high school or less and vocational education, respectively.

¹²The association decreases from 0.0171 to 0.0146 for father-sons and from 0.00990 to 0.00844 for mother-daughters in the fully specified model. The confidence intervals overlap with the baseline model.

Figure 8: Effects Along the Distribution



Notes: The sample includes individuals of Danish ancestry born between 1966-1974. See above for the full list of covariates. Estimates were obtained by replacing the continuous measure of gender norms with dummies for each decile. Point estimates are relative to the baseline which is 1st decile - the most male-dominated occupations.

To understand the effects along the distribution of the main explanatory variables, I use dummies for each decile of $GO_{i,t}^{Mom}$ and $GO_{i,t}^{Dad}$ instead of the continuous measure. These coefficients are plotted in Figure 8. For fathers, the effects are fairly linear. The parent-son associations are plotted in panels (a) and (b) and the parent-daughter associations are plotted in (c) and (d). Starting with the sons, for each decile, the effect on the share of women in the sons' occupation increases. All estimates are different from the baseline (which is the most masculine occupations containing fathers that work in occupations with virtually no women). However, it is worthwhile to remember that the median in this sample is just 7 % women in the occupation. Only deciles 9 and 10 can be characterized as resembling gender balance with the cut-off at 36 and 55 % women, respectively. For the mother-son as-

sociation, the pattern is less clear and estimates are less precise compared to the father-son association. Sons with mothers in occupations with less than 40 % women but more than 85 % enter occupations with more women. This is relative to the mothers in the most male-dominated occupations - those with less than 40 % women. The largest point estimate of the mother-son association is 1/4 of the largest point estimate of the father-son association.

For girls, the pattern is reversed. The father-daughter relationship is imprecisely estimated and no clear pattern emerges, and the mother-daughter relationship is almost linear. For mothers working in heavily feminized occupations, the mother-daughter association is 2/3 of the father-son association in the most feminized occupations.

4 Empirical Strategy

This section explains the empirical strategy and presents tests for the validity and relevance of the strategy.

4.1 Estimating Equation

The constructed data set contains information on students from multiple cohorts within the same school. This allows me to exploit across-cohort-within-school variation to estimate the effect of schoolmates' parents' labor market behavior. Identification relies on the quasi-randomness of the labor market behavior of schoolmates' parents. While parents may choose the school for their children based on the characteristics of the parents of the schoolmates, it is unlikely that they are aware of how the composition changes across cohort. The variance over time in the share of women in the schoolmates' parents' occupation in Figure 5 confirms this.

My empirical model can be written as:

$$\begin{aligned}
GO_{i,t+1,s} = & \delta_1 GO_{i,t,s}^{PeerDad} + \delta_2 GO_{i,t,s}^{PeerDad} * Girl + \delta_3 GO_{i,t,s}^{PeerMom} + \delta_4 GO_{i,t,s}^{PeerMom} * Girl \\
& + \beta_1 GO_{i,t}^{Mom} + \beta_2 GO_{i,t}^{Mom} * Girl + \beta_3 GO_{i,t}^{Dad} + \beta_4 GO_{i,t}^{Dad} * Girl \\
& + \lambda_t + \lambda_t * Girl + \lambda_s + \theta_s t + \varepsilon_{i,t} X_{i,t} + \varepsilon_{i,t,s}
\end{aligned} \tag{2}$$

where i denotes the individual, t denotes the year of graduation, and s denotes the school. The outcome $GO_{i,t+1,s}$ is the share of women in the occupation of individual i who graduated from school s at time t . The main explanatory variables are listed in the first line of the equation: $GO_{i,t,s}^{PeerDad}$ and $GO_{i,t,s}^{PeerMom}$ which denote leave-out-means of the gender composition of the occupation of the fathers and mothers of the schoolmates. Moreover, I interact these variables with a dummy, taking the value 1 if the child is a girl, following [Eble & Hu \(2022\)](#).¹³ For each individual i , $GO_{i,t,s}^{PeerDad}$ captures the average share of women in the paternal occupations of schoolmates computed from the school-cohort distribution after removing individual i from the distribution. Equivalently, $GO_{i,t,s}^{PeerMom}$ captures the average share of women in the maternal occupation of schoolmates at the school-cohort level after removing i . The coefficients δ_1 and δ_3 reflect the relationship between the gender composition of the occupation of the schoolmates' fathers and mothers, respectively, and the gender composition of the boys' occupation as adults. For girls, $\delta_1 + \delta_2$ reflect the effect from the gender composition of the occupation of schoolmates' fathers, while $\delta_3 + \delta_4$ reflect the effect from the gender composition of the occupation of schoolmates' mothers. Again, I standardized these measures. The estimates for the δ_i 's are interpreted as the effect of an increase of one standard deviation. This corresponds to an increase of 4.1 % more women in schoolmates' fathers' occupations and 7.5 % more women in the mothers' occupations, respectively.

I include the gender composition of the child's own parents' occupations. Parent-child correlation is an object of interest in itself, and the main object of analysis in [Hederos \(2017\)](#)

¹³An alternative approach would be to estimate separately for each sex. The interaction terms imply that these two approaches are equivalent. My preferred approach is to use the full sample in one regression to avoid issues of power.

and [Humlum et al. \(2019\)](#). This correlation assists in benchmarking the relative importance of schoolmates' parents and own parents as role models, as custom in the literature (e.g. [Olivetti et al. \(2018\)](#); [Bifulco et al. \(2011\)](#); [Eble & Hu \(2022\)](#)). I add a set of family-level controls, $X_{i,t}$, incl. maternal labor supply, sibling composition, household income, and educational attainment. They are all measured when the focal person is 15 years old. Year fixed effects, λ_t , control for non-linear changes over time. I interact year with a gender dummy to capture a general decline in gender segregation. School fixed effects, λ_s , capture unobserved differences in average cohort member characteristics across schools (i.e. sorting) as well as other aspects of school quality that are constant across cohorts within a school. Finally, $\theta_s t$ is a school-specific linear time trend.

4.2 The Credibility of the Identification Strategy

The idea is to treat the composition of students by cohort within a school as quasi-random and to use this to identify the social spillover effect from schoolmates' parents on adult outcomes. Before moving on to the main analysis, I follow [Olivetti et al. \(2018\)](#) and [Bifulco et al. \(2011\)](#) to document that the strategy is valid and that there is sufficient variation left after adding school and year fixed effects.

Table 5: Balancing Test for Cohort Composition

Dependent variable	(1)	(2)	(3)
<hr/>			
Leave-out-Mean of Peers' Father's Occupation			
Same-sex sibling	0.301*** (0.0244)	0.0912*** (0.0281)	0.0162 (0.0293)
Number of siblings	-1.362*** (0.0443)	-0.425*** (0.0499)	-0.0491 (0.0521)
Age, mother	1.824*** (0.235)	1.394*** (0.269)	-0.214 (0.280)
Parents marital status	-0.428*** (0.0272)	-0.162*** (0.0323)	-0.00933 (0.0346)
Vocational Training, father	0.139*** (0.0244)	0.0572** (0.0280)	-0.0132 (0.0291)
At least some college, father	0.574*** (0.0200)	0.122*** (0.0221)	0.00803 (0.0229)
<hr/>			
Leave-out-Mean of Peers' Mother's Occupation			
Same-sex sibling	0.0589*** (0.0185)	0.0988*** (0.0230)	0.0324 (0.0241)
Number of siblings	-0.274*** (0.0339)	-0.331*** (0.0407)	-0.0260 (0.0425)
Age, mother	1.030*** (0.179)	1.607*** (0.221)	-0.163 (0.231)
Parents marital status	0.0643*** (0.0159)	-0.0373** (0.0184)	0.00748 (0.0188)
Vocational training, father	0.249*** (0.0184)	0.0766*** (0.0228)	0.0235 (0.0238)
At least some college, father	-0.00541 (0.0146)	0.134*** (0.0176)	0.0238 (0.0184)
<hr/>			
Leave-out-Mean of Peers' Mother's Labor Supply			
Same-sex sibling	0.212*** (0.00957)	0.0243* (0.0125)	-0.0309** (0.0138)
Number of siblings	-1.054*** (0.0186)	-0.253*** (0.0237)	0.0134 (0.0259)
Age, mother	-0.351*** (0.0992)	0.936*** (0.127)	-0.0440 (0.139)
Parents marital status	-0.168*** (0.00670)	-0.0665*** (0.00879)	0.0109 (0.00986)
Vocational training, father	0.257*** (0.00948)	0.0706*** (0.0124)	0.0203 (0.0137)
At least some college, father	0.260*** (0.00728)	0.0868*** (0.00939)	0.0101 (0.0104)
School fixed effects	No	Yes	Yes
Year fixed effects	No	No	Yes

Notes: The table reports descriptive statistics for the composition of parents' labor market behavior, before and after removing year and school fixed effects, and school trends.

For identification, labor market outcomes of schoolmates' parents should be quasi-random. While the graphical inspection reported in Figure 5, the labor market behavior of schoolmates' parents could be correlated with other characteristics that affect student outcomes. To directly test this, I check whether the schoolmates' parents' labor market

characteristics are correlated with other characteristics of the student: sibling sex composition, number of siblings, educational attainment of the father, marital status of the parents, and age of the mother. Except for marital status, it is difficult to imagine how these characteristics should be affected by schoolmates' parents' characteristics, and are thus useful for investigating if sorting on pre-determined characteristics is taking place. The degree of sorting on observables likely provides a good indicator of the degree of sorting on unobservables (Altonji et al., 2005). Table 5 reports these "balancing tests" and supports the notion that the model specification identifies an exogenous source of variation and uncorrelated with other important characteristics. Column (1), without any controls, shows that family characteristics of student i correlate with the leave-out-mean from schoolmates' parents. This is expected if there is any sorting across school-districts. Importantly, these effects are greatly reduced by adding school fixed effects. When adding a time trend, only one of the estimated correlations is significantly different from zero - the sibling sex composition. This mitigates concerns about systematic sorting beyond the school level, and concerns about correlated factors that influence outcome. This supports the validity of the identification strategy.

In Table 6, I show the extent of variation over cohorts within school after taking out school fixed effects and school trends. Reassuringly, the results mirror Figure 5 and show sufficient variation in the main explanatory variables, that is the leave-out-means. The gender composition of the occupations of the focal person's parents are reported for comparison. Panel A and B report the variation in the gender composition of the occupation of the schoolmates' fathers and mothers, respectively.

At the school level, there is substantial variation in the gender share of occupations of fathers and mothers. On average, fathers work in occupations with 16.3 % female workers with a standard deviation of 4 %. This share ranges from 3.8 % to 42.2 %. Mirroring this, mothers work in occupations with on average 65 % women with a standard deviation of 6.2 %. This share ranges from 29.8 % to 87.9 %. Most importantly, after adding school fixed effects and a time trend, there is considerable residual variation left. The standard deviation after adding school and year fixed effects corresponds to approx. 75 % of the raw variation of both schoolmates' mothers' and fathers' occupations. Adding a school trend

substantially decrease variation, and only 12 % of the variation is left. Panel C reports the variation in labor supply of the schoolmates' mothers. On average, the mothers work 53 % of full time (approx. 20 hours/week), ranging from 14.1 % to 89.4 %. Again, adding school and level fixed effects still leaves sufficient variation but when adding school trends, little variation is left.

Table 6: Raw and residual variation in peers' parents' labor market behavior

	Mean	SD	Min	Max
Panel A: Fathers' occupation				
Own father's occupation	0.176	0.225	0	1.000
Leave-out-Mean, cohort members' father	0.163	0.0394	0.0378	0.422
Residual:				
Net of year and school fixed effects	0	0.0294	-0.121	0.157
Net of grade and school fixed effects and school trends	0	0.00460	-0.0329	0.0152
Panel B: Mothers' Occupation				
Own mother's occupation	0.754	0.240	0.00233	1.000
Leave-out-Mean, cohort members' mother	0.647	0.0621	0.298	0.879
Residual:				
Net of year and school fixed effects	0	0.0475	-0.270	0.201
Net of grade and school fixed effects and school trends	0	0.00491	-0.0201	0.0305
Panel C: Mothers' Labor Supply				
Labor Supply, Mother	533.7	396.7	0	1,000
Leave-out-Mean, cohort members' mother	533.1	110.2	141.3	894.2
Residual:				
Net of year and school fixed effects	0	53.66	-307.7	227.4
Net of grade and school fixed effects and school trends	0	7.943	-33.61	33.37

Notes: The table reports descriptive statistics for the composition of parents' labor market behavior, before and after removing year and school fixed effects, and school trends.

Combined, these two exercises support the identification strategy as both valid and leaving enough variation to identify meaningful effects. First, it appears that selection into schooling is sufficiently dealt with when adding school fixed effects. Unobserved factors that influence within-school-variation in both cohort comparison and outcomes are unlikely to confound the estimates. Second, there is sufficient variation after taking out school and year fixed effects of the explanatory variable to obtain useful estimates. The coefficients can then be interpreted as what [Manski \(1993\)](#) refers to as a contextual effect. That is, I identify the effect of specific characteristics of the school environment: the effect of the gender composition of occupations of schoolmates' parents and the extent it transmits to the next generation.

5 Results

In this section, I present the impact from exposure to different male role models, obtained from estimating Equation 2. I report the father-son and mother-son association along with the estimates that can be given a causal interpretation. After reporting the main results, I conduct a series of horse race regressions by adding other sources of peer effects.

5.1 Main Results

The main results are presented in Table 7. In the first column, I only include fathers' occupations. I report the father-child correlation, as well as the main contextual effect, the gender composition of the occupation of the schoolmates' fathers. The parent-child association estimated here is very similar to the partial correlations obtained from Equation 1. Most importantly, I also find a positive relationship between the gender composition of the occupations of the fathers of the schoolmates and the boys' occupation in adulthood. An increase in one standard deviation (equivalent to 4 %) of the share of women in the occupation of schoolmates' fathers increases the share of women by 1 % on a baseline of 34.5 %. The effect on girls is negative and approximately 1/3 of the effect on boys (the sum of the baseline and the interaction). This is confirming that male role models are more important for boys than for girls. The effect from fathers' occupations hardly changes when the gender composition of mothers' occupations is added, and at baseline (Column (2)) the gender composition of mothers' occupations is neither influencing boys nor girls.

However, adding a leave-out-mean of maternal labor supply of the peers' mothers reduces the point estimates on the effect from peers' fathers, and increases the size of the point estimate for peers' mothers. The effect from the gender composition of the occupation of the schoolmates' mothers is significant for both boys and girls. For boys, a higher share of women in the occupation of schoolmates' mothers leads to a decrease of the share of women in their occupation as adults. For girls, more women in the occupations of the schoolmates' fathers' leads to a decrease in the share of women in their own occupations. The effect is approx. 1/3 of the size, compared to the boys. The share of women in the occupations

of the peers' mothers increases the share of women in the girls' occupations. The role of maternal labor supply is further explored below.

Table 7: Effects of Schoolmates' Parents on Gender Composition of own Occupation

	(1)	(2)	(3)	(4)	(5)
<hr/>					
<u>Peers' Parents</u>					
<i>GO^{PeerDad}</i>	0.00959*** (0.00108)	0.00962*** (0.00113)	0.00669*** (0.00111)	0.00667*** (0.00111)	0.00542*** (0.00111)
<i>GO^{PeerDad}#Girl</i>	-0.0161*** (0.00147)	-0.0158*** (0.00153)	-0.0102*** (0.00145)	-0.0102*** (0.00145)	-0.00802*** (0.00147)
<i>GO^{PeerMom}</i>		-0.00159 (0.00110)	-0.00578*** (0.00119)	-0.00580*** (0.00118)	-0.00434*** (0.00117)
<i>GO^{PeerMom}#Girl</i>		0.00158 (0.00148)	0.00891*** (0.00157)	0.00887*** (0.00156)	0.00632*** (0.00152)
<i>MLS^{PeerMom}</i>			0.0113*** (0.00148)	0.0111*** (0.00148)	0.00675*** (0.00154)
<i>MLS^{PeerMom}#Girl</i>			-0.850*** (0.108)	-0.838*** (0.108)	-0.443*** (0.103)
<hr/>					
<u>Own Parents</u>					
<i>GO^{Dad}</i>	0.0214*** (0.000885)	0.0216*** (0.000925)	0.0213*** (0.000927)	0.0207*** (0.000923)	0.0207*** (0.000926)
<i>GO^{Dad}#Girl</i>	-0.0219*** (0.00113)	-0.0213*** (0.00120)	-0.0210*** (0.00120)	-0.0209*** (0.00120)	-0.0209*** (0.00120)
<i>GO^{Mom}</i>		-0.00500*** (0.000942)	-0.00466*** (0.000945)	-0.00424*** (0.000944)	-0.00417*** (0.000942)
<i>GO^{Dad}#Girl</i>		0.0167*** (0.00130)	0.0162*** (0.00130)	0.0161*** (0.00130)	0.0161*** (0.00130)
MLS, continuous			1.65e-05*** (3.17e-06)	1.63e-05*** (3.31e-06)	1.67e-05*** (3.32e-06)
MLS, continuous#Girl			-2.32e-05*** (4.24e-06)	-2.27e-05*** (4.24e-06)	-2.31e-05*** (4.25e-06)
Constant	0.485*** (5.56e-06)	0.487*** (8.03e-06)	0.476*** (0.00655)	0.540*** (0.0257)	0.582*** (0.0600)
Observations	179,240	155,718	155,718	155,718	155,030
R-squared	0.380	0.378	0.378	0.379	0.379
Year	Yes	Yes	Yes	Yes	Yes
School FE	Yes	Yes	Yes	Yes	Yes
Family				Yes	Yes
Sibling					Yes
Municipal					Yes

Notes: This table shows results for estimating the effects of exposure to different role models, i.e. the gender composition of the occupation the peers' parents from estimating Equation 2. Individual controls are added progressively. The outcome of interest is the gender composition of own occupation at age 45. Standard errors clustered at the school level. *** p<0.01, ** p<0.05, * p<0.1

Comparing the father-son and the causal estimate from peers' fathers shows considerable peer effects. Starting with Column (1), the effect from an one standard deviation increase in the share of women in peers' fathers is almost half of the size of a one standard-deviation increase in the share of women in the fathers' occupation. Column (5) provides a more conservative but still sizeable effect of roughly 1/4. It is worthwhile to remember that the standard deviation of the share of women in peers' fathers' occupation is 4.2 %, while the standard deviation of the share of women in the fathers' occupation is 24 %.

5.2 Mechanisms

To understand these effects in relation to other established sources of peer effects, I run a series of horse race regressions. I start with mothers' labor supply, which likely also captures gender norms. Then I move on to other known sources of peer effects. Again, I construct leave-out-mean at the school-year level. I focus on the extent to which the main estimates on $GO^{PeerDad}$ and $GO^{PeerMom}$ decrease when these measures are added. I construct leave-out-means for each of these characteristics of schoolmates' parents and progressively add them to my main specification and interact with gender.

To explore the role of mothers' labor market behavior, I interchange the continuous measure of labor supply with dummies. First, I add the share of schoolmates' mothers that work less than 50 % of full time, then I add the share that works part-time but at least 50 % of full-time, and finally the share that works full-time. This is reported in Table 8. For boys, any measure of maternal labor supply reduces the effects from peers' fathers with 40 %. For girls, adding maternal labor supply does not alter the influence from fathers. The effect from peers' mothers' occupations increases when accounting for maternal labor supply, regardless of measure, and this is true for both boys and girls. Looking at the direct effect from labor supply, being exposed to a larger share of mothers that work part-time - compared to other cohorts in the same school - decreases the share of women in the boys' occupation, and increases the share of women in the girls' occupation. Mothers working part-time are still argueably part-time home makers, and thus these children are still exposed to the norms of men and women having very different roles. On the other hand,

when more mothers work full-time boys enter occupations with more women and girls enter occupations with fewer women. Somewhat surprisingly, maternal labor supply appears to matter more for boys than for girls. During this period, the share of mothers who work full time increased from 22 % to 38 %. Thus, women working full-time are uncommon and may challenge prevalent gender norms. Women working part-time is arguably still conforming to gender norms by being (part-time) homemakers, thus still exposing the children to the notion of the different role of women and men in the family. Being exposed to a relatively large share of mothers that work full time, reduces gender segregation in the next generation.

Using the same empirical approach and US Addhealth data, [Olivetti et al. \(2018\)](#) show that the extensive margin of peers' mother's labor force participation influences the likelihood of girls working once they reach adulthood. They find no effect on boys. In this setting — Denmark in the '80s — the vast majority of mothers work. The extensive margin is maybe less relevant here compare to the US setting in the '90s studied by [Olivetti et al. \(2018\)](#). Instead, whether peers' mothers work full or part-time is a more relevant margin for what influences the next generation, and I find larger effects for boys than girls. Moreover, I show that exposure to other types of gender norms than maternal labor supply are influencing both boys and girls.

Table 8: The Role of Maternal Labor Supply of Schoolmates' Mothers

	(1)	(2)	(3)	(4)	(5)
$GO^{PeerDad}$	0.00953*** (0.00113)	0.00542*** (0.00111)	0.00554*** (0.00111)	0.00623*** (0.00111)	0.00543*** (0.00111)
$GO^{PeerDad}\#Girl$	-0.0156*** (0.00153)	-0.00802*** (0.00147)	-0.00827*** (0.00146)	-0.00940*** (0.00147)	-0.00797*** (0.00146)
$GO^{PeerMom}$	-0.00169 (0.00109)	-0.00434*** (0.00117)	-0.00448*** (0.00116)	-0.00238** (0.00112)	-0.00300*** (0.00107)
$GO^{PeerMom}\#Girl$	0.00167 (0.00147)	0.00632*** (0.00152)	0.00622*** (0.00151)	0.00275* (0.00146)	0.00439*** (0.00141)
$MLS^{PeerMom}$		0.00675*** (0.00154)			
$MLS^{PeerMom}\#Girl$		-0.0103*** (0.00183)			
$<1/2^{PeerMom}$			-0.00716*** (0.00141)		
$<1/2^{PeerMom}\#Girl$			0.00973*** (0.00173)		
$[1/2;FullTime]^{PeerMom}$				0.000380 (0.00107)	
$[1/2;FullTime]^{PeerMom}\#Girl$				0.00131 (0.00144)	
$FullTime^{PeerMom}$					0.00589*** (0.00139)
$FullTime^{PeerMom}\#Girl$					-0.00992*** (0.00171)
Constant	0.527*** (0.0235)	0.574*** (0.0604)	0.571*** (0.0587)	0.557*** (0.0585)	0.590*** (0.0596)
Observations	155,718	155,030	155,030	155,030	155,030
R-squared	0.371	0.373	0.373	0.373	0.374

Notes: This table shows a series of regression adding leave-out-means of maternal labor supply. Column (1) corresponds to column (2) in Table 7, and column (2) to the fully specified model from column (7) in Table 7. The leave-out-means reflect the share of mothers working less than half time, between half time and full time, and full time, respectively. Standard errors clustered at the school level. *** p<0.01, ** p<0.05, * p<0.1

Further, I add other characteristics of the schoolmates' parents that have been shown to generate peer effects in prior work.¹⁴ First, I add the gender composition of the classroom. Then, I progressively add the share of schoolmates' fathers' that have completed vocational training and the share of fathers that have at least some college education. Finally, I add the share of households in the bottom and top 25 % of the income distribution for a given year. These leave-out-means are calculated the same way as the gender composition of the occupations of parents, implying that the variation is within the school but across cohorts.

¹⁴Peer ability has produced peer effects in many dimensions. However, for this cohort grades are not available. Moreover, closer ties should arguably generate larger peer effects. However, I don't have information on classes within a cohort or more direct measures of friendships.

Again, I interact these measures with the dummy taking the value 1 in the case where the child is a girl.

The results from this exercise are reported in Table 9. Column (1) adds the sex ratio of the cohort to the baseline specification reported in column (5) in Table 7 and this doesn't influence the estimates of $GO^{PeerDad}$ or $GO^{PeerMom}$. Adding the share of fathers that has at least some college education reduces the effect, while the share of fathers with vocational training has no effect. Additionally, adding measures of income don't influence the effect of the gender composition of fathers' or mothers' occupations. However, income and educational measures correlate, so adding income without education also reduces the effect. Boys who were socialized in cohorts where a large share of fathers hold at least some college enter occupations with a higher share of women compared to boys - in the same school - who are socialized in cohorts with fewer fathers with at least some college education. The opposite is true for girls: Those exposed to a higher share of fathers with a college degree enter occupations with a smaller share of women. A similar pattern emerges for those exposed to a higher share of schoolmates being from the richest 25 % of households: Boys in these cohorts enter occupations with a higher share of women, and girls enter occupations with fewer women.

Table 9: Horse Race Regression - Other Sources of Peer Effects

	(1)	(2)	(3)	(4)	(5)
$GO^{PeerDad}$	0.00543*** (0.00111)	0.00525*** (0.00110)	0.00261** (0.00109)	0.00265** (0.00109)	0.00302*** (0.00109)
$GO^{PeerDad}\#Girl$	-0.00804*** (0.00146)	-0.00750*** (0.00144)	-0.00273* (0.00141)	-0.00277** (0.00140)	-0.00345** (0.00140)
$GO^{PeerMom}$	-0.00435*** (0.00117)	-0.00397*** (0.00116)	-0.00272** (0.00114)	-0.00265** (0.00114)	-0.00194* (0.00115)
$GO^{PeerMom}\#Girl$	0.00632*** (0.00120)	0.00544*** (0.00119)	0.00308** (0.00120)	0.00303** (0.00119)	0.00185 (0.00122)
Sex ratio, cohort	0.00853 (0.0140)	0.00734 (0.0139)	0.0113 (0.0138)	0.0114 (0.0138)	0.0122 (0.0138)
Sex ratio, cohort#Girl	-0.00273 (0.0183)	-0.00156 (0.0183)	-0.00581 (0.0183)	-0.00623 (0.0183)	-0.00691 (0.0183)
Vocational edu.		-0.0259** (0.0124)	0.0399*** (0.0126)	0.0353*** (0.0128)	0.0310** (0.0129)
Vocational edu.#Girl		0.0765*** (0.0150)	-0.0398*** (0.0143)	-0.0288* (0.0150)	-0.0223 (0.0150)
At least some college			0.142*** (0.0142)	0.137*** (0.0144)	0.104*** (0.0162)
At least some college#Girl			-0.237*** (0.0142)	-0.224*** (0.0148)	-0.171*** (0.0179)
Low Income HH				-0.00923 (0.0158)	0.00788 (0.0162)
Low Income HH#Girl				0.0475** (0.0185)	0.0199 (0.0194)
High Income HH					0.0591*** (0.0152)
High Income HH#Girl					-0.0829*** (0.0165)
Constant	0.576*** (0.0600)	0.573*** (0.0600)	0.571*** (0.0603)	0.573*** (0.0605)	0.573*** (0.0605)
Observations	155,030	155,030	155,030	155,030	155,030
R-squared	0.373	0.373	0.375	0.375	0.375

Notes: This table shows results for a series of horse race regressions, including additional leave-out-means to assess the relative importance of gender composition of the occupation of parents and other known sources of peer effects. The starting point is the fully specified model from column (7) in Table 7. Household income and fathers' educational levels are coded as dummies so the leave-out-means reflects the share with this characteristic. Rich and poor households correspond to the top and bottom 25th percentiles in a given year. Standard errors clustered at the school level. *** p<0.01, ** p<0.05, * p<0.1

6 Concluding Remarks

Labor market outcomes are not only affected by economic opportunities. A large literature shows how gender norms influence women’s labor force participation and other economic outcomes ([Fernandez et al. \(2004\)](#); [Fernández & Fogli \(2009\)](#); [Goldin & Olivetti \(2013\)](#); [Farré & Vella \(2013\)](#); [Alesina et al. \(2013\)](#); [Olivetti et al. \(2018\)](#)). However, much less attention has been paid to how gender norms influence men’s labor market outcomes.

This paper shows that labor market segregation in one generation transmits to the next, while role models acting in counter-stereotypical ways decrease gender segregation in the next generation. I extend on widely used measures of gender norms and use the gender composition of parents’ occupations. These measures are intended to capture the transmitted norms of the ‘appropriate role’ of men and women in society and complement the use of maternal labor supply. First, I document stable father-son and mother-daughter associations in the gender composition of occupations. Second, I exploit within-school-across-cohort variation in the gender composition of schoolmates’ parents to identify a causal impact from other role models. This exercise confirms the importance of same-sex role models for gender segregation in the next generation. The effects are stronger for boys than for girls. In general, mothers’ labor market behavior hardly influences the gender composition of sons’ occupations. However, in cohorts where mothers defy existing gender norms — by working full time — they influence outcomes of both boys and girls, and in particular, boys are making less gender stereotypical choices themselves.

In the last decades, many western economies have seen a steady fall in the employment share of traditionally male-dominated, manufacturing sectors. Men’s roles both in society and within families are changing, and this is creating hardship, in particular at the left tail of the income distribution. Many studies have shown dire consequences, with the extreme case of increased male mortality (e.g. [Autor et al. \(2019\)](#); [Coile & Duggan \(2019\)](#); [Browning & Heinesen \(2012\)](#); [Sullivan & von Wachter \(2009\)](#)). Meanwhile, health care and the service sector is growing but men appear reluctant to enter these occupations. This paper highlights a need for an improved understanding of gender norms as a potential source of friction.

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A.1 Correlation Across Measures

Table 10: Correlation across measures of gender norms

	1)	2)	3)	4)	5)	6)	7)	8)	9)
1) Leave-out-Mean, peers' father's occ	1.00								
2) Leave out Mean, peers' mother's occ	0.2101	1.00							
3) Leave out Mean, maternal labor supply	0.4257	0.5164	1.00						
4) Leave-out-mean, working mother ==1	0.3958	0.6024	0.9068	1.00					
5) Own father's occupation	0.0494	0.0024	0.0299	0.0173	1.00				
6) Own mother's occupation	-0.0121	0.0205	-0.0127	-0.0021	-0.0405	1.00			
7) Own working mother==1	0.0239	0.0196	0.0462	0.0398	0.0129	0.0610	1.00		
8) Duncan Index in Childhood	-0.3717	-0.0218	-0.5022	-0.4114	-0.0523	0.0259	-0.0360	1.00	
9) Female LFP in Childhood	0.2034	0.2910	0.5165	0.3992	0.0262	-0.0236	0.0401	-0.2268	1.00

add notes

A.2 Incl. Homemakers

Table 11: Intergenerational Correlation - Parent-Child Associations, Incl. home makers

	Sons					
	(1)	(2)	(3)	(4)	(5)	(6)
GO^{Dad}	0.0224*** (0.00114)	0.0221*** (0.00111)	0.0170*** (0.000739)	0.0171*** (0.000731)	0.0171*** (0.000740)	0.0170*** (0.000737)
GO^{Mom}		-0.00153* (0.000928)	-0.00153* (0.000680)	-0.00195** (0.000711)	-0.00183** (0.000655)	-0.00191** (0.000700)
MLS, [1/2;full time[-0.00651** (0.00228)	
MLS, <1/2 time					-0.000712 (0.00173)	
MLS, continous				-8.32e-06** (2.87e-06)		-7.90e-06** (2.86e-06)
Constant	0.284*** (0.00299)	0.284*** (0.00298)	0.334*** (0.0333)	0.308*** (0.0297)	0.306*** (0.0312)	0.228*** (0.0290)
Observations	145,793	125,649	125,649	125,649	125,649	125,229
R-squared	0.023	0.024	0.048	0.048	0.048	0.049
	Daughters					
	(1)	(2)	(3)	(4)	(5)	(6)
GO^{Dad}		8.90e-05 (0.000513)	0.00241*** (0.000489)	0.00211*** (0.000511)	0.00218*** (0.000507)	0.00217*** (0.000522)
GO^{Mom}	0.0109*** (0.000528)	0.0110*** (0.000542)	0.00789*** (0.000630)	0.00892*** (0.000661)	0.00906*** (0.000661)	0.00894*** (0.000678)
MLS, [1/2;full time[0.000640 (0.00103)	
MLS, <1/2 time					-0.00590*** (0.00126)	
MLS, continous				1.71e-05*** (1.78e-06)		1.67e-05*** (1.88e-06)
Constant	0.609*** (0.00295)	0.609*** (0.00289)	0.805*** (0.0195)	0.878*** (0.0222)	0.901*** (0.0245)	0.855*** (0.0638)
Observations	148,227	124,444	124,444	124,444	124,444	124,057
R-squared	0.012	0.012	0.019	0.020	0.020	0.020
Municipal	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Family			Yes	Yes	Yes	Yes
Siblings						Yes
Municipal norms						Yes

A.3 Rank Rank Associations

Table 12: Intergenerational Rank-Rank Correlation - Parent-Child Associations

	Sons					
	(1)	(2)	(3)	(4)	(5)	(6)
GO^{Dad}	0.0826*** (0.00309)	0.0825*** (0.00294)	0.0663*** (0.00169)	0.0664*** (0.00170)	0.0661*** (0.00171)	0.0663*** (0.00173)
GO^{Mom}		-0.0346*** (0.00265)	-0.0155*** (0.00206)	-0.0157*** (0.00206)	-0.0143*** (0.00205)	-0.0148*** (0.00196)
MLS, [1/2;full time[-0.577** (0.219)	
MLS, <1/2 time					-0.122 (0.192)	
MLS, continous				-8.32e-06** (2.87e-06)		-7.90e-06** (2.86e-06)
Constant	34.04*** (0.315)	35.74*** (0.332)	53.44*** (5.195)	51.06*** (5.543)	51.49*** (5.586)	47.09*** (7.887)
Observations	145,793	125,649	125,649	125,649	125,649	125,229
R-squared	0.024	0.026	0.048	0.048	0.048	0.049
	Daughters					
	(1)	(2)	(3)	(4)	(5)	(6)
GO^{Dad}		-0.00814*** (0.00133)	0.00448** (0.00188)	0.00422* (0.00190)	0.00432* (0.00190)	0.00453** (0.00187)
GO^{Mom}		0.0514*** (0.00239)	0.0403*** (0.00266)	0.0406*** (0.00267)	0.0398*** (0.00263)	0.0401*** (0.00282)
MLS, [1/2;full time[-0.0159 (0.0967)	
MLS, <1/2 time					-0.684*** (0.129)	
MLS, continous				0.00122*** (0.000226)		0.00118*** (0.000230)
Constant		68.11*** (0.253)	98.75*** (4.046)	103.3*** (4.125)	104.1*** (4.234)	99.81*** (7.243)
Observations	148,227	124,444	124,444	124,444	124,444	124,057
R-squared	0.013	0.013	0.021	0.021	0.021	0.021
Municipal	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Family			Yes	Yes	Yes	Yes
Siblings						Yes
Municipal norms						Yes

A.4 Transmission of Education

Table 13: Intergenerational Correlation - Parent-Child Associations, Excl. Same education

	Sons					
	(1)	(2)	(3)	(4)	(5)	(6)
GO^{Dad}	0.0192*** (0.00104)	0.0192*** (0.00108)	0.0146*** (0.000784)	0.0147*** (0.000788)	0.0146*** (0.000791)	0.0146*** (0.000799)
GO^{Mom}		-0.00480*** (0.000780)	-0.00141** (0.000579)	-0.00147** (0.000587)	-0.00109 (0.000589)	-0.00144** (0.000558)
MLS, [1/2;full time[-0.00566** (0.00215)	
MLS, <1/2 time					0.000251 (0.00209)	
MLS, continous				-9.21e-06** (3.13e-06)		-8.83e-06** (3.13e-06)
Constant	0.284*** (0.00282)	0.284*** (0.00297)	0.467*** (0.0580)	0.432*** (0.0618)	0.438*** (0.0621)	0.458*** (0.0757)
Observations	141,010	121,368	121,368	121,368	121,368	120,967
R-squared	0.021	0.022	0.043	0.043	0.043	0.044
	Daughters					
	(1)	(2)	(3)	(4)	(5)	(6)
GO^{Dad}		6.81e-06 (0.000610)	0.00273*** (0.000613)	0.00257*** (0.000620)	0.00261*** (0.000614)	0.00263*** (0.000614)
GO^{Mom}	0.0111*** (0.000683)	0.0112*** (0.000686)	0.00835*** (0.000803)	0.00843*** (0.000803)	0.00823*** (0.000786)	0.00844*** (0.000823)
MLS, [1/2;full time[-0.000471 (0.00102)	
MLS, <1/2 time					-0.00623*** (0.00126)	
MLS, continous				1.17e-05*** (2.09e-06)		1.13e-05*** (2.12e-06)
Constant	0.607*** (0.00287)	0.607*** (0.00279)	0.933*** (0.0361)	0.977*** (0.0366)	0.985*** (0.0372)	0.959*** (0.0710)
Observations	123,198	119,023	119,023	119,023	119,023	118,658
R-squared	0.012	0.012	0.022	0.022	0.022	0.022
Municipal	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Family			Yes	Yes	Yes	Yes
Siblings						Yes
Municipal norms						Yes

A.5 Maternal Education

Table 14: Heterogeneity by Maternal Educational Attainment

	Boys High School or Less (1)	Girls (3)	Boys Vocational (3)	Girls (4)	Boys At Least Some College (5)	Girls (6)
GO^{Dad}	0.0138*** (0.00101)	0.00127 (0.000927)	0.00139 (0.000911)	0.00109 (0.00133)	0.00272* (0.00120)	0.00297 (0.00162)
GO^{Mom}	0.00243* (0.00119)	0.00681*** (0.00131)	-0.00181 (0.00148)	0.00927*** (0.00132)	-0.0123*** (0.00113)	0.0145*** (0.00139)
MLS, continous	-1.06e-05** (4.25e-06)	7.39e-06* (3.57e-06)	-1.39e-05** (5.71e-06)	9.60e-06* (5.10e-06)	6.85e-07 (5.15e-06)	2.07e-05** (8.45e-06)
Constant	0.160 (0.145)	0.805*** (0.0727)	-0.645*** (0.122)	1.297*** (0.158)	0.572*** (0.160)	1.135*** (0.169)
Observations	50,267	49,559	47,792	47,556	25,774	25,587
R-squared	0.031	0.018	0.027	0.019	0.042	0.047
Municipal	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Family	Yes	Yes	Yes	Yes	Yes	Yes
Siblings	Yes	Yes	Yes	Yes	Yes	Yes
Municipal Norms	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The sample includes individuals of Danish ancestry born between 1966-1974. Estimates obtained from estimating Equation 1, separately for boys and girls, split by maternal educational attainment. See above for a full list of covariates. Standard errors clustered at birth year. Measures of maternal labor supply is obtained from mandatory pension contributions. Standard errors clustered at birth year, *** p<0.01, ** p<0.05, * p<0.1