



Like My Mother Before Me: Gender and Cross-Gender Effects on Status Attainment during Modernization^{*}

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ABSTRACT

In social inequality research, the impact of mothers' position on the transmission of family resources to children is often neglected. We ask what the effects of mothers' and fathers' status were on their sons' and daughters' status attainment in the nineteenth and early twentieth century in the Netherlands, and how these effects changed over time. We use occupational information in marriage record data to investigate the status of 465,790 sons and 157,967 daughters. Mothers' occupational and employment status mattered for both sons' and daughters' status attainment. Over time, the gender-specific influence of parental status on children's status remained stable, while the cross-gender impact of parental status on daughters' status attainment increased.

1. Introduction

In 1967 Blau and Duncan published *The American Occupational Structure*; they dedicated it to their fathers "Theodor I. Blau and Otis Durant Duncan whose occupational achievements greatly facilitated those of their sons". There is probably no study that affected and inspired stratification researchers more, not only by introducing path models to stratification research, but also by relating status attainment to ethnicity, geographical origin, kinship, marriage, and fertility. Nevertheless, the book is a product of the time in which it was written. The 1960s were the heydays of the male breadwinner. Most men and women probably agreed that a division of labor in which the woman took care of the children and the household chores and the man participated in the labor market was most desirable. As a result, few women had a job and sociologists refrained from asking women about their occupational career. This is reflected in the absence of women in Blau and Duncan's status attainment model and in their dedication.

Since then, studies on recent periods have shown that mothers' status characteristics do influence children's status attainment (Beller, 2009; Korupp, Ganzeboom, & Van Der Lippe, 2002), but even recently, articles appeared with exactly this finding in the title (e.g., Hout, 2018).

From the 1960s onwards, the labor force participation of married women increased substantially, leading to a growing contribution of mothers to the household's resources. Given this trend, neglecting the maternal influence arguably leads to an underestimation of the overall influence of social origin on status attainment and to biases in our understanding of the openness of a society (Beller, 2009).

In this article, we argue that mothers' status not only had an influence on children's status attainment after the 1960s, but also before. In the nineteenth and early twentieth century the male breadwinner model was less common than in the post-WWII period and a considerable proportion of all women were in the labor market – often out of necessity (Boter, 2017; Janssens, 2014; Pott-Buter, 1993). In the Netherlands – the country we will study – almost half of all marrying women had an occupation around 1870 (Schulz, Maas, & van Leeuwen, 2014). This share later decreased, reflecting the growing importance of the male breadwinner model. Women's position in the nineteenth and early twentieth century was connected to the possession of economic resources (including earnings and work-related experience) and noneconomic resources (e.g., cultural and social network resources). Therefore, instead of simply following the conventional view and disregarding mothers' influence, we will investigate the influence of

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mothers' position on children's status attainment in a historical context.

Only a few historical studies have investigated maternal impact. They found that a mother's position was important for her daughters' status attainment (Bras, 2004; Schulz et al., 2014). However, Bras (2004) investigated only the status attainment of women who were servants in Zeeland (a province in the Netherlands), and both these studies assumed that the maternal effect did not change over time.

This latter assumption is rather unlikely. According to modernization theory the influence of family origin on individuals' status attainment decreased due to modernization processes (Treiman, 1970). This theory has been investigated for the Netherlands and other European countries in the nineteenth century with respect to the influence of fathers' status and was supported (Knigge, Maas, van Leeuwen, & Mandemakers, 2014; Maas & Van Leeuwen, 2016). Since this theory does not distinguish between fathers and mothers but refers to the change of the influence of family origin in general, it may also apply to the trend in maternal impact. We will confront modernization theory with an alternative notion suggested by Schulz (2015). She has pointed out that in the Netherlands modernization processes affected the status attainment of men and women differently. As a consequence the effect of mothers' status may also have changed differently from that of fathers' status.

This study poses the following questions: (1) *To what extent did mothers' (besides fathers') occupational status and employment status affect children's status attainment in the nineteenth and early twentieth century in the Netherlands?* (2) *Did the effect of mothers' (and fathers') status change during that period?*

We ask these questions for both men and women living in the Netherlands in the period 1810 to 1921. To answer these questions, we use the GENLIAS database consisting of all marriage records in five Dutch provinces. An advantage of using marriage record data is that they suffer less from under-reporting of women's labor force participation, which is a common problem in census data (Van Poppel, Van Dalen, & Walhout, 2009). Besides, the geographic and temporal coverage of marriage records allow us to overcome shortcomings of previous historical studies that are restricted to certain subpopulations or small regions, or investigate only a short period of time (Knigge et al., 2014).

We found that in the nineteenth and twentieth century in the Netherlands, daughters' status attainment was affected by mothers' occupational and employment status, net of the influence of fathers' occupational status. The same is true for sons' status attainment, albeit the influence of mothers' status is marginal. These findings shed some light on the importance of the influence of mothers' status in the status transmission process in a historical context. Regarding the trends in the influences of mothers' and fathers' status, we found that the gender-specific influence of parental status on children's status attainment remained stable over time, whilst the cross-gender influence of parental status on daughters' status attainment became more important over time.

2. Theory and hypotheses

2.1. The status attainment process

Intergenerational mobility research focuses on the association between individual status attainment and social origin. Blau and Duncan's (1967) status attainment model states that parental resources help children to directly or indirectly obtain a good position in society. They focused on the status attainment of men: sons can either directly inherit their fathers' occupational position – by inheriting the family business for instance – or their occupational position is indirectly influenced by fathers' investment in their education. Unfortunately, we do not have information on an individual's educational attainment in our data. We cannot distinguish between the direct and indirect effect of parental resources on children. Instead, we investigate the overall effect of

parental status on their children's status attainment. Unlike Blau and Duncan, however, we do include mothers' status to distinguish the effects of fathers' and mothers' resources, and we study the status attainment of both sons and daughters.

2.1.1. The transition of economic resources

The main mechanism of parental effects on children's status is the transfer of economic resources. According to the "conventional view" (Goldthorpe, 1983, 1984), the family, instead of the individual, is the unit of social stratification. All family members share the same social position, because family members who live together have similar resources and life chances. As it is usually the husband who has the greatest commitment, highest wage, and continuity in the labor market, he contributes the most to family resources. Hence, according to this view, the social position of all family members is determined by the position of the husband. Even in dual-earner families, the wife's position is derived from her husband's position instead of being related to her own occupation. The contribution of women's employment for the accumulation of family resources is considered to be minor, as women usually bring in much less in terms of resources compared to the male head of the household (Goldthorpe, 1984). Therefore, women's position in the labor market is considered to be peripheral for the transmission of family resources to children.

The "conventional view" may seem to describe well the situation in the nineteenth and early twentieth century in the Netherlands. The labor force participation of married women was restricted by social norms and laws (Boter, 2017; Van Poppel et al., 2009). Although it was possible and sometimes necessary for the wife to carry out paid labor, the types of jobs women could do were limited. In addition to working in farming, women were concentrated mainly in low skilled and low status jobs, such as domestic service (Van Poppel et al., 2009). From the late nineteenth century onwards, some women ventured in higher skilled occupations, such as teaching in schools, working in an office, or, if available at their municipality, the administration of large companies (Schulz, 2015). Fig. 1 displays that at the end of the period we are studying, i.e., the first decades of the twentieth century, primary school teachers appeared among the most frequent occupations of women at marriage, albeit at the lower tail of the distribution. The figure also illustrates that among working young women there is shift away from agriculture. Nevertheless, during the whole period the most common occupation was house servant, an unskilled, low paid, and low status job that most women only performed for a limited period when they were young (Bras, 2004). Therefore, it is not unreasonable to assume that, in the period that we study, only fathers' occupational status affected children's status attainment. We formulate the *conventional view hypothesis* as: *H1a: In the nineteenth and early twentieth century, fathers' occupational status positively affected children's status, but mothers' occupational status did not.*

Since the 1960s, the number of married women participating in the labor market has increased substantially. More importantly, the number of households in which the wife has a higher occupational position than the husband increased (Heath & Britten, 1984). These changes challenged the applicability of the conventional view to a modern society and sparked a debate with regard to the proper measure of family position (e.g., Heath & Britten, 1984; Leiulfsrud & Woodward, 1987; 1988). It is argued that the unit of stratification should be the individual rather than the family (Acker, 1973; Leiulfsrud & Woodward, 1987; Sorensen, 1994; Stanworth, 1984). Relatedly, whether or not the male head of the household determines the family position should be an empirical question rather than an unquestionable assumption for all social inequality research (Acker, 1973). Research has shown that, regardless of her occupational status, a woman's gainful employment has an influence on the position of her family members, and this influence is additional to the impact of her husband (Davis & Robinson, 1988; Heath & Britten, 1984).

This reasoning can also be applied to the Netherlands in the

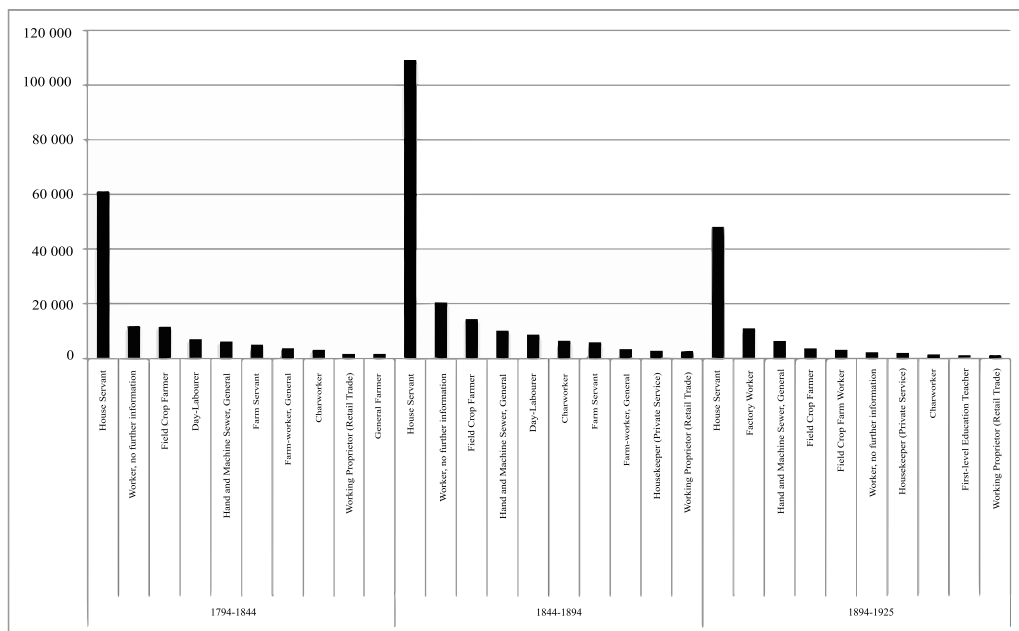


Fig. 1. Ten most frequent occupation titles of Dutch women in 19th and early 20th Century.

Source: cross-tabulations using the GENLIAS dataset version 2007 03

nineteenth and early twentieth century. Many mothers had an occupation at least part of their lives (Janssens, 2014; Pott-Buter, 1993). Even though they usually earned less than their husbands, their gainful employment still increased the total amount of economic resources that could be transferred to their children or invested in their children's career (Boter, 2017). Consequently, the status of each parent may have independently affected the children's status attainment. We therefore test a competing hypothesis, labelled by Korupp, Ganzeboom, and van der Lippe (Korupp et al., 2002) as the *individual hypothesis: H1b: In the nineteenth and early twentieth century, fathers' and mothers' occupational status each had their own positive effect on children's status.*

2.1.2. The sex-role model

The sex-role model addresses parental influence on the status attainment of children differently. In general, it is assumed that children identify with the same-sex parent and imitate the behavior of that parent (Acocck & Wen, 1984; Boyd, 1989). Either through socialization processes, i.e. parents positively reinforcing children's "appropriate" behavior, or by unconscious imitation, children internalize the attitudes and behavior of the same-sex parent. These processes have been shown to exist for religiosity, political orientation, attitudes, and future career choices (Acocck & Bengtson, 1978, 1980; Boyd, 1989). Thus, girls are generally more oriented towards their mothers while boys are more oriented towards their fathers.

With respect to labor market orientation and behavior, studies have shown that daughters with working mothers are more inclined to work than those whose mothers do not work, and daughters' career orientation is more affected by mothers' employment status than by fathers' (Rosenfeld, 1978; Stevens & Boyd, 1980). Historical research in Spain has demonstrated that in the first half of the twentieth century the influence of mothers' educational level on daughters' education and the fertility rate was more substantial than the influence of the fathers (Baizán & Camps, 2007).

Besides, gender segregation in a labor market may also facilitate the impact of the same-sex parent on children with regard to work. In a gender-segregated labor market, the majority of women work in female-typed jobs, such as domestic service or drying peat, while men do male-typed jobs such as industrial jobs, farming or cutting peat (Boter, 2017; Bras, 2004; Janssens, 2014; Pott-Buter, 1993). This means that

girls are more likely to take the same or a similar female-typed job as that of their mothers than to take a job similar to their fathers'. As a consequence, mothers' working skills and work-related knowledge are more useful for their daughters' career than fathers' resources. Relatedly, mothers are more able to help their daughters and to prepare them for their careers than they are in the case of their sons. Similarly, sons are most likely to participate in male sex-typed jobs, so they are more likely to profit from their fathers' working experience than from their mothers', and fathers are more able to invest in their sons than in their daughters.

Research on the transfer of status between twentieth century parents and children does not support the hypotheses derived from the sex-role model (Beller, 2009). However, in the nineteenth century, both gender norms and gender segregation in the labor market were pronounced in Dutch society (Janssens, 2014). The *sex-role hypotheses* are therefore an interesting alternative to the gender-neutral individual hypothesis 1b. *H2: In the nineteenth and early twentieth century, daughters' status was more positively affected by mothers' occupational status than by fathers', and H3: Sons' status was more positively affected by fathers' occupational status than by mothers'.*

2.1.3. The transmission of noneconomic resources

Economic resources are clearly important in the transmission of the family position to the children (Hill & Duncan, 1987), but so are position-related noneconomic resources, such as cultural and social capital (Beller, 2009; Bourdieu & Passeron, 1990). Parents in advantaged positions can provide their children with advantageous noneconomic resources (Lareau & Weininger, 2003), which help their children achieve higher positions than other children. For example, parents from the middle and upper classes are more able to teach their children sophisticated social skills, such as negotiating with authorities (Lareau & Weininger, 2003), and they also have greater knowledge of educational bureaucracies (Lareau & McNamara Horvat, 1999) than parents from lower classes.

In the nineteenth and most of the twentieth century, the "male-breadwinner model" was commonly practiced among middle and upper classes in which the male wage was sufficient for family survival (Schmidt & van Nederveen Meerkerk, 2012; Van Poppel et al., 2009). For other families, it is argued that women's labor force participation

was not an “act of choice” but an “act of necessity” (De Groot, 1988; Knotter, 1999, pp. 205-230). These women had husbands of low occupational status whose earnings were not sufficient to support the family (Boter, 2017). As a consequence, married women who were housewives were more likely to be from high status families, in which women tended to have more cultural or social network resources than an average working mother. Since housewives also had more opportunities to interact with their children than working mothers, this facilitated the transmission of cultural resources (e.g. Beller, 2009). Our first *noneconomic resources hypothesis* therefore is H4: *In the nineteenth and early twentieth century, the status of children with a homemaker mother was higher than the status of children with an average working mother.*

Not all housewives, however, had an equal amount of social and cultural capital. Housewives from a higher social background were more likely to have attended secondary schooling than those from a lower social background. Additionally, housewives could also transfer cultural capital from their parents to their children, such as speaking without a dialect. Hence the higher the status of the parents of a housewife, the more noneconomic resources she could transfer to her children. We formulate the second *noneconomic resources hypothesis* H5: *In the nineteenth and early twentieth century, the occupational status of the parents of a homemaker mother positively affected the status of her children.*

2.2. Trends in status attainment

During the nineteenth and early twentieth century, many western countries experienced modernization, including industrialization, educational expansion, development of mass transport and of mass communication, and urbanization. According to the modernization thesis, along with modernization individuals' family origin became less important for status attainment, while individuals' achievement, such as educational attainment and work experience, became increasingly important (Treiman, 1970). This was partly due to the changes in the occupational structure that emerged with modernization. New jobs appeared that required well-trained employees. But modernization processes also led to the dissemination of universalistic values stressing that people should not be valued on the basis of characteristics such as parental status. Accordingly, employer's recruitment behavior shifted from ascription based to achievement based. As a consequence of both developments, parents became less able to pass on their occupations or related occupational skills to their children.

It has been shown that fathers' status became a less important determinant of sons' status during modernization (Knigge et al., 2014; Maas & Van Leeuwen, 2016). In line with the modernization thesis, the influence of mothers' status can be expected to have decreased as well. Firstly, this is the case because industrialization created new and relatively high status jobs for women in administrative sectors (Schmidt & van Nederveen Meerkerk, 2012). The development of textile and other manufactories also created a demand for female labor in new

occupations (Boter, 2017; Janssens, 2014). Secondly, girls benefited from educational expansion too. They increasingly attended schools. While primary education became mandatory in 1901, it was the norm well before that date for boys and for girls (Knippenberg, 1986; Mandemakers, 1996). From the 1860s onwards, different types of vocational or girls' school, such as specialized domestic service and teaching schools, emerged in the Netherlands and the number of women entering secondary education rose much (Schulz, 2015). Educational expansion allowed girls to gain educational qualifications that could help them achieve higher status jobs and prepare them for the labor market. The expansion of primary education itself created new job opportunities for women to work as a teacher. Thirdly, mass communication and mass transport enabled women to access job opportunities beyond their parental social network and to migrate from their parental home to more developed areas with better job opportunities (Schulz, 2015). To summarize, with modernization it became more difficult for mothers to transfer relevant skills to their daughters and it became less necessary for girls to learn these skills. We formulate as our *modernization hypothesis*: H6a: *The positive effect of parents' occupational status (both fathers' and mothers') on their children's status decreased during the nineteenth and early twentieth century.*

It has been argued, however, that during modernization the influence of fathers' status on that of his daughter changed differently compared to that of mothers' status. According to Schulz (2015), the influence of fathers' status on daughters' status increased with modernization. Economic resources from the father could more easily be of use to daughters in a more modern society than before. For example, girls with high-income fathers were more likely to obtain secondary education than other girls, so they were more able to get into high status jobs. Girls from wealthier families were more likely to get access to employment information and take advantage of that than other girls, simply because they could afford to buy newspapers and to travel. According to this argumentation, a shift in the relative importance of more occupation-specific versus more general resources took place, with the first becoming less important and the latter becoming more important. Thus we can expect fathers' status to have become more important for his daughters' career success. We formulate our *shift of resources hypothesis* as: H6b: *Whereas the positive effect of mothers' occupational status on daughters' status decreased, the positive effect of fathers' occupational status on daughters' status increased during the nineteenth and early twentieth century.*

Note that such an increase might also pertain to the effect of mothers' resources on their sons' status. However, we expect this increase to be smaller. Financial resources especially are easily used to further children's status attainment in more indirect ways. And a mother's contribution to the financial resources of the household was usually smaller than that of the father. An overview of the hypotheses is given in Table 1.

Table 1

Overview of the hypotheses on intergenerational status transfer in the nineteenth and early twentieth century.

<i>Conventional view hypothesis</i>	
H1a	Fathers' occupational status positively affected children's status, but mothers' occupational status did not.
<i>Individual hypothesis</i>	
H1b	Fathers' and mothers' occupational status each had their own positive effect on children's status.
<i>Sex-role hypotheses</i>	
H2	Daughters' status was more positively affected by mothers' occupational status than by fathers'.
H3	Sons' status was more positively affected by fathers' occupational status than by mothers'.
<i>Non-economic resources hypotheses</i>	
H4	The status of children with a homemaker mother was higher than the status of children with an average working mother.
H5	The occupational status of the parents of a homemaker mother positively affected the status of her children.
<i>Modernization hypothesis</i>	
H6a	The positive effect of parents' occupational status (both fathers' and mothers') on their children's status decreased during the nineteenth and early twentieth century.
<i>Shift of resources hypothesis</i>	
H6b	Whereas the positive effect of mothers' occupational status on daughters' status decreased, the positive effect of fathers' occupational status on daughters' status increased during the nineteenth and early twentieth century.

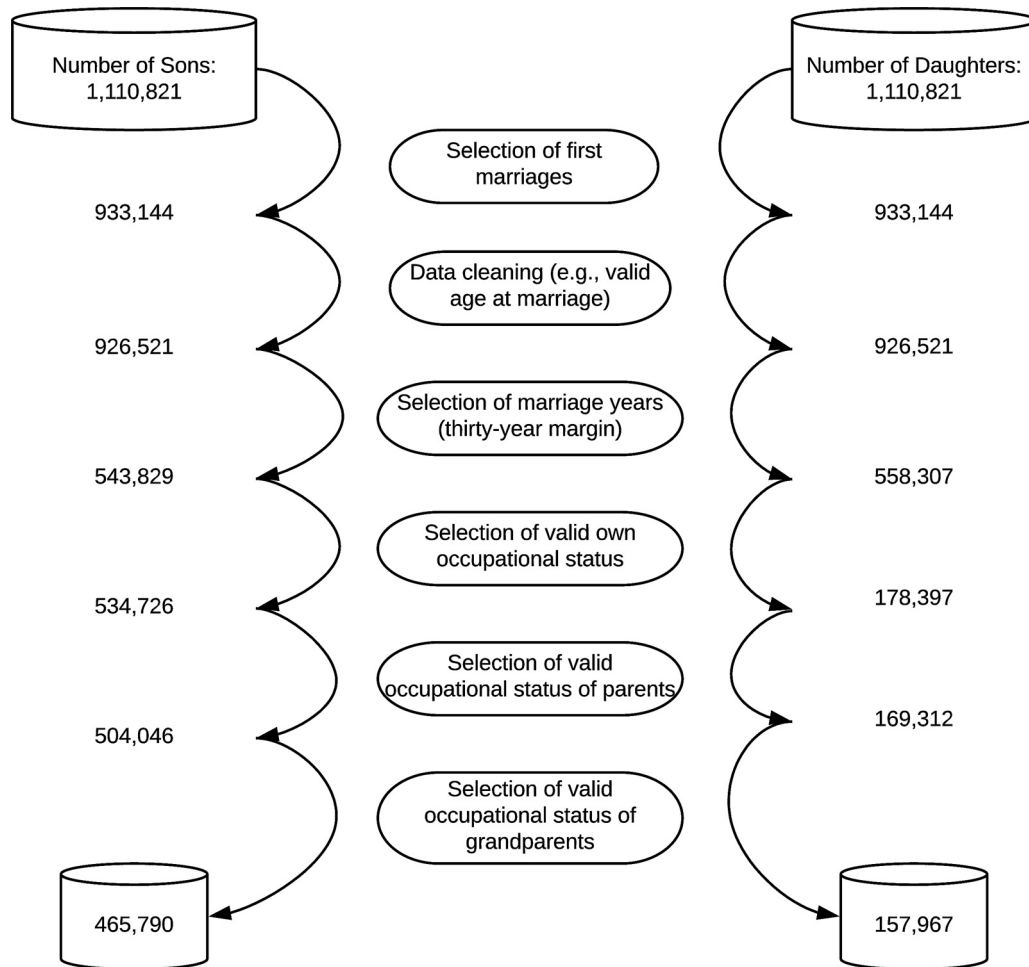


Fig. 2. Selection process.

3. Data

3.1. Data description

The data used in this study are from the GENLIAS dataset (Oosten & Mandemakers, 2007), which contains 1,110,821 marriage records in the Netherlands of couples who married in the period 1812 to 1921. These marriage records include information on the place and time of marriage; the name, age, birthplace, and the occupational title of bride and bridegroom. Names and occupational titles of both parents are also included on the records.

We used a version of GENLIAS (version 2007_03) that linked marriage certificates of children and their parents. Links were made by matching the first and last names of parents on their own marriage certificates and on their children's marriage certificates using a computer algorithm. Minor variations in the spelling of names are allowed. Supplementary information such as age of the spouses is used to minimize the likelihood of creating wrong links. The linking method has been applied to marriage records both between and within the five Dutch provinces: Groningen, Overijssel, Gelderland, Limburg, and Zeeland (for more details, see Oosten, 2008).

Using these data has several advantages. First, in a historical context, it is difficult to obtain an accurate image of women's labor force participation. Compared to other historical data sources, marriage certificates contain relatively precise occupational information for women. At marriage, women reported their occupation themselves, while in censuses women's occupations were often reported by their husband or a male census official. The self-reporting process is believed

to reduce the under-reporting of women's occupation compared to census data (Van Leeuwen & Zijdemans, 2014). Even if there had been a "civil servant filter", i.e., civil servants might decide themselves what kind of women's occupation should be written down on the marriage certificates, we believe that this effect is likely to be minor judging by the variety of and detailed information on occupational titles recorded. Second, from the linked marriage records we have occupational information on the grandparents of brides and grooms. Very few historical datasets have occupational information on three generations, and such information can be used to test hypotheses on the transmission of noneconomic resources of housewives. Third, the linked GENLIAS data cover a long period of time and a large number of cases, making it possible to examine changes in status attainment even at a slow rate of change (Van Leeuwen, Maas, Rébaudo, & Pélissier, 2016).

However, these historical data also have certain disadvantages. First, we miss people who never married. This is not as problematic as one may think, because the percentages of men and women who never married were below 15% during the nineteenth century (Engelen & Kok, 2002). Research has also found that never married men were not very different from those who married in terms of socioeconomic status, family background, and other aspects (e.g., religion, region) (Engelen & Kok, 2002). For women this was not so. Those who never married needed to provide for their own, and with respect to status attainment this made them different from women who married. Our data allow us to examine only the status attainment of married women, which is a serious limitation. Schulz (2015), however, has studied never married women in a similar context that provides some insights for those especially interested in the status attainment of this group of women.

Table 2
Descriptive statistics of all variables.

	Sons				Daughters			
	Mean/Proportion	SD	Min	Max	Mean/Proportion	SD	Min	Max
<i>Dependent variable</i>								
Occupational status	46.60	12.87	10.60	99	23.59	16.56	10.60	99.00
<i>Independent variables</i>								
Fathers' occupational status	44.06	11.95	10.60	99	41.22	10.66	10.60	99.00
Mothers' occupational status	23.61	11.34	10.60	99	24.05	12.49	10.60	90.00
Mother housewife	50.59		0	1	36.14		0	1
Status of maternal parents	47.44	7.02	10.60	99	46.55	6.56	10.60	99.00
Time	6.74	2.23	0.30	11	6.87	2.22	0	11.10
<i>Controls</i>								
Age at marriage	27.69	5.33	16	79	25.59	4.81	16	63.00
Sibship size	3.71	1.99	1	21	3.75	1.99	1	19.00
Birth order	2.37	1.55	1	19	2.37	1.55	1	18.00
Number of individuals		465790				157967		
Number of families		268096				111089		
Number of communities		7222				3886		

Second, as the data relate to linked marriages within and between five provinces only parents and children who married in these provinces were included in the data. We also miss information on migrants who moved into this area after marriage. This is also less problematic than one may assume, because according to the census data the number of people who migrated to a province different from where they were born was relatively low in the period that we study: 8% in 1849, 13% in 1899, and 15% in 1930 (Knigge et al., 2014; Knippenberg & Pater, 1990). Moreover, as almost half of the total number of provinces was included in the data, we expect the number of links we missed due to migration will have been small.

3.2. Selections

We made several selections from the GENLIAS dataset (see Fig. 2). First, we included only couples of which both partners married for the first time. The influence of family background on status attainment might be different for men and women who remarried, as they do so in a later phase of their career, and this could bias our results.

Second, we removed data on brides and grooms without known birth year or place. We also excluded brides or grooms of unlikely age at marriage, i.e., below 16 years old.

Third, data on children who married at the beginning and parents who married at the end of the observed period cannot be included. For children who married shortly after 1812, their parents' marriage records are not included in the data. Similar circumstances apply to parents who married just before 1921. Their children's marriage records are not in the data either. In order to make sure that all children have an equal chance of having parents' marriage records, and all parents have an equal chance of having their children's marriage records in the data, we apply a thirty-year margin to the data (following Knigge et al., 2014). Thus, we include only children who married after 1842 and parents who married before 1892. This leaves us with 1,102,136 individuals who married between 1842 and 1921, and whose parents married between 1812 and 1892.

Fourth, for the remaining individuals, we made several selections based on the availability of information on their own occupation, that of their parents, and that of their grandparents. We cannot study individuals' status attainment if they don't have an occupation at marriage (68.03% of the brides and 1.67% of the grooms). We lost a large number of brides due to this selection, therefore, we contemplated several alternative approaches. For example, we could try to estimate the status of housewives and assign this value to all brides without an occupation. However, this would create a very large category of brides with equal status, which would strongly affect our estimates.

Alternatively, we could give brides without an occupation their husband's status. However, this would mix status attainment on the labor market with status attainment through marriage. Since our hypotheses are on occupational status attainment, we decided to study only brides that worked, even though this was a minority of all brides.

We exclude individuals with either missing or invalid values for their fathers' occupational status (2.3% of the brides and 2.8% of the grooms). Since we have hypotheses on employment status of mothers, we keep homemaker mothers in our data (see measurement section for details). We only exclude individuals whose mothers' occupational information was too vague for us to either assign an occupational status to it, or treat her as being a housewife (2.9% of the remaining brides and 3.0% of the remaining grooms). We also exclude individuals whose grandparents' occupational information is either missing or not sufficient (6.6% of the brides and 7.6% of the grooms). After the list-wise deletion of these cases, we end up having 157,967 brides (daughters) and 465,790 grooms (sons) for our analyses.

4. Measurement

4.1. Dependent variable

Occupational status of bride and groom: A son's or daughter's occupational status is based on the occupational title stated on their marriage certificate. All the occupational titles in the data have been classified using the Historical International Standard Classification of Occupations (HISCO) (Van Leeuwen, Maas, & Miles, 2004; Van Leeuwen, Maas, & Miles, 2002), which is equivalent to a historical version of ISCO68. In order to translate occupational categories into a scale score, we use HISCAM, a historical status scale (Lambert, Zijdeman, van Leeuwen, Maas, & Prandy, 2013). HISCAM has been designed based on the assumption that patterns of social interaction, such as marriages or friendships, between people from different occupational strata can represent the overall structure of occupational stratification. Theoretically, the scale ranges from 1 to 99. In our data, we observe a range from 10.6 to 99. A high value in HISCAM indicates a high occupational status (see Table 2 for descriptive statistics on all variables).

4.2. Independent variables at the individual and family level

Occupational status of fathers and mothers: For both fathers' and mothers' occupational status, we used the occupational information on their own marriage records. Fathers' and mothers' occupational status were not highly correlated, probably due to the low degree of variation

in mothers' occupations (Pearson's $r = 0.09$). In order to keep housewives in our analyses, we give all women who did not mention an occupation the average score of the occupational status of working mothers. In this way we can compare housewives with the average working woman (Allison, 2002, p.10).

Treating those who do not mention an occupation as housewives may be problematic for farmers' wives. Approximately 14% of all brides and grooms had a mother in this category. One may argue that these farmers' wives might actually assist their husbands with agricultural activities. If so, they might be able to transfer occupational skills to their children and in that way affect their status attainment. We investigated whether treating these women as farmers instead of housewives would change our results. This was not the case.

Mother housewife: We created a dichotomous variable indicating whether (1) or not (0) a mother was a housewife at the time of her own marriage. We assume that mothers for whom no occupation is recorded on their marriage certificate were housewives (compare Van Poppel et al., 2009).

Occupational status of the mothers' parents: We take the average HISCAM score for the mother's father at the marriage of the mother and at the marriage of each of the mother's siblings. For the mother's mother we do the same. If we have occupational information on both the grandfather and the grandmother, we measured grandparents' occupational status by taking the highest occupational status (most often the grandfather). For individuals for whom we have occupational status on only one maternal grandparent, we took the one that is available.

Time: Time refers to the period in which brides and grooms were socialized, which we assume to be 15 years after they were born. This is similar to the practice in contemporary surveys, where questions like "What was your father's occupation when you were 15" are asked to indicate the family conditions in which someone was socialized. We code the first observed year (1810) to 0 and the scale is then divided by 10. We also include a categorical variable *Time period*, which captures decades.

4.3. Control variables

We control for several variables at the individual and family level. Firstly, the *age at marriage* of brides (daughters) and grooms (sons) is taken as a control, because age is often related to working experience and seniority, which influence one's status attainment. Secondly, *sibship size* is taken into account; this is approximated by the number of married siblings. According to the resource dilution hypothesis, the number of children in a family is related to the amount of family resources each child can access. Lastly, we control for *birth order*, as it can influence the amount of resources or care a child received.

5. Analytical strategy

We perform separate analyses on the occupational status of brides (daughters) and that of grooms (sons). We use cross-classified multi-level regression to test our hypotheses. By using a cross-classified model, we allow siblings to be nested both in families and in communities. Following the suggestion by Knigge et al. (2014) we define the community of socialization as the birthplace in the year the groom or bride was 15. The nesting structure is presented in Fig. 3.

First, we estimate an intercept-only model as our baseline model to establish the overall effect of family background:

$$Y_{ijk} = \beta_{00} + f_{0j} + c_{0k} + fc_{0jk} + e_{ijk}$$

(M1) where Y_{ijk} is the occupational status of individual (bride or groom) i from family j and community k . β_{00} is the population mean of occupational status. $f_{0j} \sim N(0, \sigma_{f_{0j}}^2)$ is the error term at the family level, $c_{0k} \sim N(0, \sigma_{c_{0k}}^2)$ is the error term at the community level, and $e_{ijk} \sim N(0, \sigma_{e_{ijk}}^2)$ is the error term at the individual level.

$fc_{0jk} \sim N(0, \sigma_{fc_{0jk}}^2)$ is the error term at the family-community level, which is usually so small that is regarded as part of e_{ijk} . We thus treat fc_{0jk} as part of e_{ijk} in all our analyses.

Second, in order to test the *conventional hypothesis*, the *individual hypothesis*, and *sex-role hypotheses*, we first add fathers' occupational status to the baseline model, and then include mothers' occupational and employment status. The formula for the third model then becomes:

$$Y_{ijk} = \beta_{00} + \beta_{10}Focc_j + \beta_{20}Mocc_j + \beta_{30}Mhw_j + f_{0j} + c_{0k} + e_{ijk}$$

(M3) where the regression coefficients β_{10} and β_{20} show respectively the strength of the influence of fathers' and mothers' occupational status on children's status attainment. The regression coefficients β_{30} indicates the effect of having a homemaker mother on children's status attainment compared to having an average working mother.

Previous research most often models separate influences of fathers' and mothers' status. However, Biblarz, Raftery and Bucur (Biblarz et al., 1997) show that merely the presence of a mother affects the strength of the impact of fathers' status on children's status attainment, and Hout (2018) finds a stronger impact of the father if the mother is a housewife. Therefore we explore how mothers' and fathers' status interact by adding interaction terms between fathers' occupational status and mothers' occupational and employment status in the fourth model (M4): $\beta_{40}(Focc_j * Mocc_j)$ and $\beta_{50}(Focc_j * Mhw_j)$.

Third, in order to analyze whether mothers' family background especially affects the status attainment of children of homemaking mothers, we add interaction terms between mothers' employment status and grandparent's occupational status. The complete model is:

$$Y_{ijk} = \beta_{00} + \beta_{10}Focc_j + \beta_{20}Mocc_j + \beta_{30}Mhw_j + \beta_{40}(Focc_j * Mocc_j) + \beta_{50}(Focc_j * Mhw_j) + \beta_{60}GPocc_j + \beta_{70}(Mhw_j * GPocc_j) + f_{0j} + c_{0k} + e_{ijk}$$

(M5) where the regression coefficient β_{60} indicates the main effect of occupational status of the maternal grandparents on children's status (i.e. the effects for working mothers), and β_{70} represents the interaction effect between grandparents' status and having a homemaker mother on children's status.

In the second part of our analyses, we test the hypotheses on changes of the influence of family background over time. To do so, we include the effect of time period (as a set of dummy variables) and interactions between time periods and parental occupational status, since the study by Knigge et al. (2014), which used the same data, suggests that the change in the effect of fathers' occupational status was not linear. Including interactions between the time periods and mothers' employment status caused severe multicollinearity problems. We therefore model the change over time in this effect by an interaction term between time (as a linear variable) and mothers' employment status.

6. Results

6.1. Effects of mothers' occupational and employment status

Model 1 in Table 3 is a baseline model of daughters' status attainment that includes only the intercept, to calculate the correlation of occupational status between sisters. This correlation is on average 0.375,¹ which means that 37.5% of the resemblance in occupational status between sisters can be attributed to family impact. For sons, Model 1 in Table 4 is the baseline model. The correlation of occupational status between brothers is 0.362. The total family effect appears to be similar for daughters and sons.

Model 2 in Tables 3 and 4 shows that the effect of fathers'

¹ This figure is calculated using: $corr_{family} = \frac{f_{0j}}{f_{0j} + c_{0k} + e_{ijk}}$, which gives the proportion of variance at the family level.

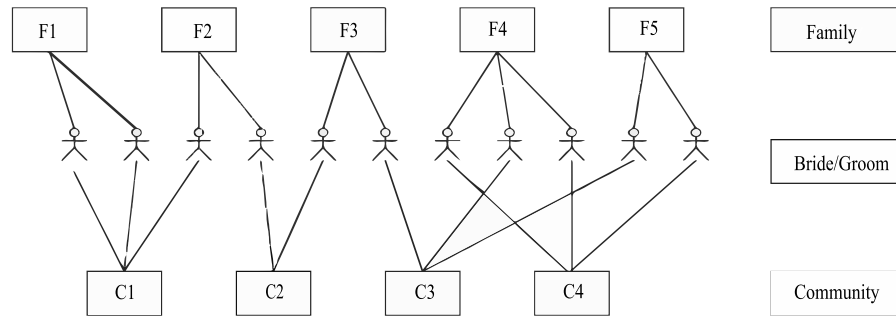


Fig. 3. Cross-classified data structure.

occupational status was positively significant on both daughters' ($\beta_{10} = 0.184$, p -2s < 0.001) and sons' occupational attainment ($\beta_{10} = 0.383$, p -2s < 0.001). For daughters, adding fathers' status reduced the unexplained family variance by 3.95%,² from 97.28 to 93.44. For sons, this reduction was much larger – 32.60% of the family variance was explained by adding fathers' status.

Model 3 in Tables 3 and 4 shows that mothers' status also had an effect on children's status attainment. For daughters, both the effect of fathers' occupational status ($\beta_{10} = 0.165$, p -2s < 0.001) and mothers' occupational status ($\beta_{20} = 0.113$, p -2s < 0.001) were positively significant. The same is true for sons (0.366 and 0.005 respectively). Mothers' occupational status, albeit lower than fathers' status, had a significant influence on both sons' and daughters' status attainment, net of the influence of fathers' occupational status.

Thus the *conventional hypothesis* (H1a), which states that only fathers' occupational status had a positive effect on children's status, is refuted, while the competing *individual hypothesis* (H1b) that fathers'

and mothers' occupational status each had a positive effect on children's status attainment is supported.

The *sex-role hypotheses* (H2 and H3) on the relative strength of the effect of mother and father on daughters' and sons' status attainment can also be tested using Model 3. Table 3 shows that for daughters' status attainment, the effect size of mothers' occupational status was smaller than that of the fathers' (0.113 compared to 0.165). For sons' status, the effects of fathers' occupational status was much stronger than that of the mothers (0.366 compared to 0.005). Thus, the sex-role hypothesis regarding mother-daughter relationship (H2) is refuted, whereas the one regarding the effect of father on sons' status attainment (H3) is supported.

Model 3 in Tables 3 and 4 also shows the effect of having a homemaker mother. The occupational status of daughters whose mother was a housewife was significantly higher than that of daughters of average working mothers ($\beta_{30} = 1.173$, p -2s < 0.001). For sons, too, the effect for homemaker mothers was positively significant ($\beta_{30} = 1.988$, p -

Table 3

Cross-classified multilevel regression model of daughters' status attainment on parental status.

	Model 1	Model 2	Daughters' occupational status		Model 5
Fathers' occupational status		0.184*** (0.004)	Model 3 0.165*** (0.004)	Model 4 0.123*** (0.005)	0.113*** (0.006)
Mothers' occupational status			0.113*** (0.004)	0.113*** (0.004)	0.111*** (0.004)
Mother housewife			1.173*** (0.095)	1.115*** (0.095)	0.883*** (0.096)
Status of maternal parents					0.144*** (0.009)
Fathers' occupational status * Mothers' occupational status				0.004*** (0.0003)	0.003*** (0.0003)
Fathers' occupational status * Mother housewife				0.108*** (0.008)	0.097*** (0.008)
Mother housewife * status of maternal parents					0.053*** (0.014)
Age at marriage		0.205*** (0.008)	0.204*** (0.008)	0.202*** (0.008)	0.195*** (0.008)
Sibship size		−0.341*** (0.026)	−0.338*** (0.026)	−0.338*** (0.026)	−0.325*** (0.026)
Birth order		−0.001 (0.027)	−0.0005 (0.027)	0.0001 (0.027)	−0.0005 (0.027)
Time		0.308*** (0.020)	0.307*** (0.020)	0.295*** (0.020)	0.411*** (0.021)
mean/intercept	21.774*** (0.156)	19.796*** (0.194)	19.439*** (0.192)	19.356*** (0.192)	18.697*** (0.193)
$\sigma^2_{\epsilon(ijk)}$	127.41 (11.290)	126.64 (11.25)	126.62 (11.25)	126.58 (11.25)	126.41 (11.25)
$\sigma^2_{\epsilon(0j)}$	97.28 (9.86)	93.44 (9.67)	91.68 (9.58)	91.19 (9.55)	90.55 (9.52)
$\sigma^2_{\epsilon(0k)}$	34.89 (5.91)	31.16 (5.58)	28.57 (5.35)	28.56 (5.34)	28.06 (5.30)
Log Likelihood	−647759.800	−646281.600	−645704.200	−645547.600	−645287.000
AIC	1295528.000	1292581.000	1291430.000	1291121.000	1290604.000
BIC	1295567.000	1292671.000	1291540.000	1291251.000	1290754.000

Notes: All continuous independent variables have been centered around the mean. Numbers in parentheses are SEs.

***p < .001; **p < .01; *p < .05

Table 4
Cross-classified multilevel regression model of sons' status attainment on parental status.

	Sons' occupational status				
	Model 1	Model 2	Model 3	Model 4	Model 5
Fathers' occupational status		0.383*** (0.002)	0.366*** (0.002)	0.276*** (0.003)	0.263*** (0.003)
Mothers' occupational status			0.005*** (0.002)	0.013*** (0.002)	0.010*** (0.002)
Mother housewife			1.988*** (0.042)	2.056*** (0.042)	1.736*** (0.042)
Status of maternal parents					0.150*** (0.004)
Fathers' occupational status * Mothers' occupational status				0.003*** (0.0002)	0.003*** (0.0001)
Fathers' occupational status * Mother housewife				0.154*** (0.003)	0.131*** (0.003)
Mother housewife * Status of maternal parents					0.074*** (0.006)
Age at marriage		0.274*** (0.003)	0.268*** (0.003)	0.266*** (0.003)	0.259*** (0.003)
Sibship size		−0.304*** (0.012)	−0.306*** (0.012)	−0.297*** (0.012)	−0.274*** (0.012)
Birth order		0.006 (0.012)	0.006 (0.012)	0.006 (0.012)	0.007 (0.012)
Time		0.944*** (0.009)	0.883*** (0.009)	0.874*** (0.009)	0.949*** (0.009)
mean/intercept	47.716*** (0.118)	40.954*** (0.101)	40.282*** (0.101)	39.957*** (0.100)	39.309*** (0.100)
$\sigma^2_{\epsilon(jk)}$	79.89 (8.94)	78.38 (8.85)	78.40 (8.86)	78.38 (8.85)	78.34 (8.85)
$\sigma^2_{\epsilon(0j)}$	69.73 (8.35)	47.00 (6.86)	46.18 (6.80)	45.34 (6.73)	43.90 (6.63)
$\sigma^2_{\epsilon(0k)}$	42.87 (6.55)	14.95 (3.87)	14.06 (3.75)	13.38 (3.66)	12.53 (3.54)
Log Likelihood	−1801641.000	−1769785.000	−1768668.000	−1767408.000	−1765256.000
AIC	3603290.000	3539589.000	3537359.000	3534842.000	3530542.000
BIC	3603335.000	3539688.000	3537481.000	3534986.000	3530707.000

All continuous independent variables have been centered around the mean. Numbers in parentheses are SEs.

***p < .001; **p < .01; *p < .05

2s < 0.001). It seems to be the case that when the mother was not working and hence did not bring economic resources into the family, her possession of non-economic resources facilitated her children's status attainment. Thus, the *non-economic resources hypothesis* (H4) on the positive effect of homemaker mothers on the status attainment of their children is supported.

Descriptive analysis provides additional support for the importance of non-economic resources of housewives. Families with a working father and mother differed from families that had only one (male) breadwinner. In theory, women's labor force participation is often assumed to be out of necessity, especially in a historical context (Van Poppel et al., 2009). Our data confirm this, as shown in Fig. 4. In dual-earner families, most husbands were working as farmer, farmhand or laborer. Some had relatively skilled manual jobs, such as tailor and weaver. In families where the husband was the only breadwinner better-off occupational titles appeared, such as buyer and proprietor in retail trade, though in this historical context, most husbands were doing manual work.

We can also assess how much variance at the family level is captured by including both parents' occupational status. Table 3 shows that for women, by adding mothers' occupational and employment status we reduced the unexplained variance at the family level by 1.88%, from 93.44 to 91.68. Model 3 in Table 4 shows that for men, this figure was even smaller – 1.74%, from 47 to 46.18. The AICs and BICs show that, for both men and women, Model 3, which includes both fathers' and

mothers' status, fits better than a model that includes only fathers' status.

Our results in Model 3 indicate that in a historical context the conventional model slightly underestimates the total influence of measured family background on men and women's status attainment but mainly misrepresents it by neglecting the influence of mothers' status. This misrepresentation is more severe for daughters than for sons. This finding is in line with several empirical findings in contemporary societies (Beller, 2009; Korupp et al., 2002).

Model 4 in Tables 3 and 4 includes interaction terms between fathers' occupational status and mothers' occupational and employment status. Table 3 shows that the main effect of fathers' occupational status on daughters' status attainment was 0.123 (p-2s < 0.001), meaning that when the daughter had a working mother with average status, the influence of her fathers' status on her own status was 0.123. There was a significantly positive interaction effect between fathers' and mothers' occupational status ($\beta_{40} = 0.004$, p-2s < 0.001). An increase of one standard deviation (11 points) in mothers' status would increase the influence of fathers' occupational status from 0.123 to 0.167. The interaction effect between fathers' status and mothers' employment status was also significantly positive ($\beta_{50} = 0.108$, p-2s < 0.001), meaning that the influence of fathers' occupational status increased by 0.108 (from 0.123 to 0.231) when the daughter had a homemaker mother compared to having an average working mother. Table 4 shows similar patterns for the status attainment of sons: mothers' occupational status amplified the positive impact of fathers' status, and the impact of fathers' status is stronger when the son had a homemaker mother than when he had an average working mother.

Model 5 in Tables 3 and 4 includes the interaction term between

² This figure is calculated by comparing changes in the variance at the family level before and after adding fathers' status: $\frac{(97.28 - 93.44)}{97.28}$.

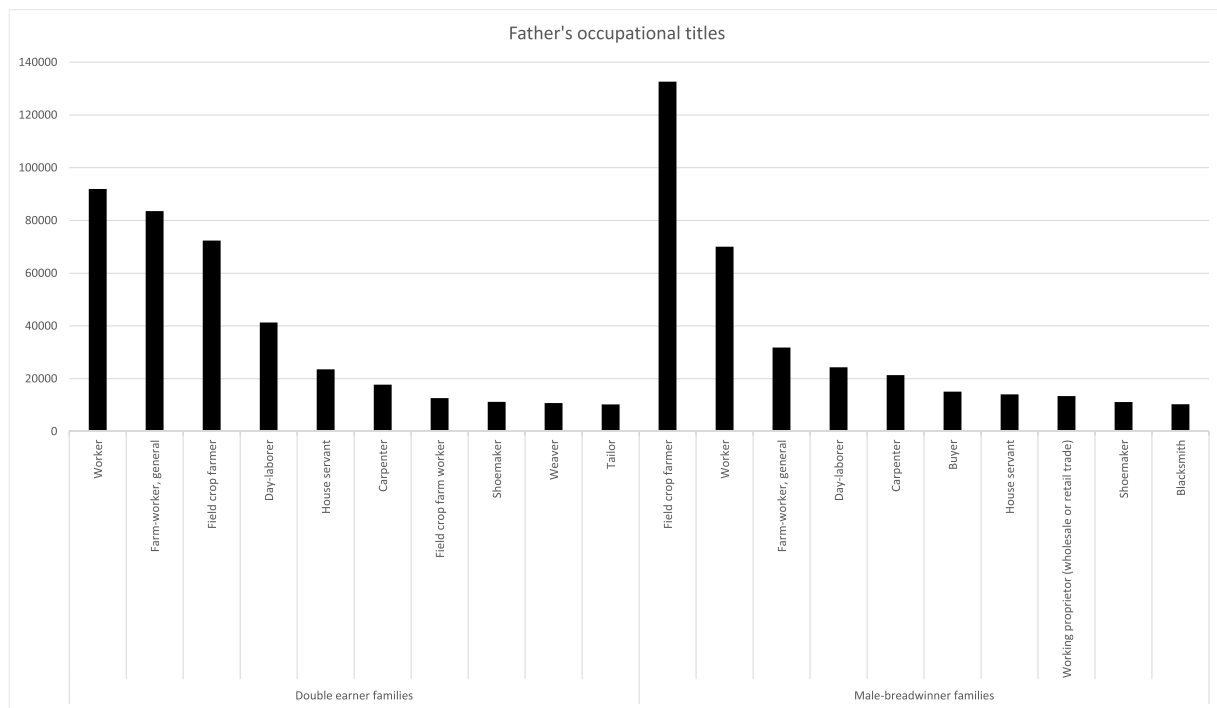


Fig. 4. Ten most frequent occupational titles of fathers by family types.
Source: cross-tabulations using the GENLIAS dataset version 2007 03

mothers' employment status and the status of the maternal parents. We expected this interaction to be positive (*non-economic resource hypothesis H5*). Table 3 shows that the main effect of the status of maternal parents on daughters' occupational status was significantly positive ($\beta_{60} = 0.144$, p -2s < 0.001). This means that the occupational status of grandparents had a positive effect on women's status attainment when they had a working mother. The interaction effect of having a mother who was a housewife and mothers' family background on daughters' status attainment was also positive ($\beta_{70} = 0.053$ p -2s < 0.001). This indicates that having a homemaker mother increases the positive effect of maternal-side grandparents' occupational status on women's status attainment from 0.144 to 0.197 when compared to having an average working mother.

Table 4 shows that the main effect of the status of maternal parents on status attainment was very similar for sons as was found for daughters ($\beta_{60} = 0.150$, p -2s < 0.001). Again, this is the effect of the occupational status of maternal-side grandparents on men's status attainment when they have a working mother with average occupational status. The interaction effect between having a homemaker mother and grandparents' occupational status was significantly positive as well. Compared to having an average working mother, having a homemaker mother led the effect of grandparents' status on men's status attainment to be 0.22 ($0.150 + 0.074$), indicating that the effect of grandparents' status became stronger when the boys had homemaker mothers.

We earlier concluded on the basis of Model 3 that having a homemaker mother was beneficiary for children's status attainment, likely due to the transmission of non-economic resources from the homemaker mother to her children. Model 5 further showed that the status of the maternal parents was more important for children's status attainment when they had a housewife mother compared to when they had an average working mother. Thus, the second non-economic resources hypothesis (H5), which stated that the status of the parents of homemaker mothers positively affected the status of children, is supported.

By comparing the model fit statistics (AICs and BICs), we can conclude that for both men and women Model 5, which includes the effects of both fathers' and mothers' status, the effect of the status of maternal parents, and the interaction terms between these effects, appears to be

the best model compared to previous ones. As for control variables, we find that the effect of marriage age was significantly positive for both sons and daughters in all models. The more advanced one was in age, the higher the occupational status one had. The effect of the number of married siblings was significantly negative for both sons and daughters, indicating that the larger the family size, the lower the status one obtained. Birth order had no significant impact on sons' or daughters' status attainment in all our models. Time had a significantly positive influence on both sons' and daughters' status attainment, indicating that there was a general trend that on average both men's and women's occupational status improved.

6.2. Changes in the influence of family origin over time periods

In the second part of our analyses, we investigate how the effects of parental status on children's status attainment changed over time. As we focus on describing main changes in parental influences, we do not include the interaction between mothers' and fathers' status, nor the occupational status of mothers' parents in subsequent models.

We added interaction terms between parental status and time periods in Table 5. The results are summarized in Fig. 5a–c. Fig. 5a shows that, for daughters, fathers' occupational status had no influence on their status attainment in 1810–1820. However, in the following decades the impact of fathers' status on daughters' status increased in the following decades. From the beginning of the twentieth century onwards the positive impact of fathers' occupational status on daughters' status attainment was significantly stronger than a century earlier. In 1900–1910 the impact of fathers' occupational status on daughters' status was 0.30 (Table 5 column two: 0.365–0.064) and in 1910–1920 it was 0.34 (Table 5: 0.404–0.064). The positive influence of fathers' occupational status on sons' status attainment shows the pattern described by Knigge et al. (2014). It increased in the first half of the 19th century and subsequently slowly decreased. However, in this model, including also mothers' status, these changes do not become significant.

Fig. 5b shows changes in the influence of mothers' occupational status on children's status attainment. The impact of mothers' occupational status on that of her daughters did not change over time. The

Table 5
Effects of parental status on children's status attainment as a function of time.

	Daughters' occupational status	Sons' occupational status
Fathers' occupational status	−0.064 (0.176)	0.251*** (0.080)
Mothers' occupational status	0.207 (0.245)	0.234* (0.102)
Mother housewife	−1.470*** (0.262)	2.425*** (0.120)
Time period (ref: 1810-1820)		
1820-1830	−3.909 (2.586)	0.687 (1.074)
1830-1840	−3.979 (2.552)	1.249 (1.063)
1840-1850	−4.066 (2.563)	0.737 (1.068)
1850-1860	−4.819 (2.581)	0.419 (1.076)
1860-1870	−6.400* (2.605)	0.309 (1.087)
1870-1880	−7.534** (2.635)	0.137 (1.101)
1880-1890	−6.956** (2.669)	0.176 (1.117)
1890-1900	−5.871* (2.709)	0.409 (1.135)
1900-1910	−4.821 (2.752)	0.641 (1.154)
1910-1920	−4.043 (2.797)	−0.033 (1.174)
Time	0.324** (0.124)	0.971*** (0.055)
Age at marriage	0.202*** (0.008)	0.269*** (0.003)
Sibship size	−0.308*** (0.026)	−0.311*** (0.012)
Birth order	−0.0003 (0.027)	0.006 (0.012)
Fathers' occupational status *		
1820-1830	0.225 (0.179)	0.075 (0.081)
1830-1840	0.159 (0.176)	0.13 (0.080)
1840-1850	0.157 (0.176)	0.143 (0.080)
1850-1860	0.167 (0.176)	0.143 (0.080)
1860-1870	0.170 (0.176)	0.146 (0.080)
1870-1880	0.200 (0.176)	0.133 (0.080)
1880-1890	0.221 (0.176)	0.119 (0.080)
1890-1900	0.298 (0.176)	0.094 (0.080)
1900-1910	0.365* (0.176)	0.068 (0.080)
1910-1920	0.404* (0.177)	0.047 (0.080)
Mothers' occupational status *		
1820-1830	−0.115 (0.248)	−0.204* (0.103)
1830-1840	−0.084 (0.246)	−0.216* (0.102)
1840-1850	−0.064 (0.246)	−0.214* (0.102)
1850-1860	−0.075 (0.246)	−0.207* (0.102)
1860-1870	−0.080 (0.246)	−0.224* (0.102)
1870-1880	−0.084 (0.246)	−0.221* (0.102)
1880-1890	−0.108 (0.246)	−0.246* (0.102)
1890-1900	−0.131 (0.246)	−0.242* (0.102)

Table 5 (continued)

	Daughters' occupational status	Sons' occupational status
1900-1910	(0.246) −0.136 (0.246)	(0.102) −0.246* (0.102)
1910-1920	−0.160 (0.246)	−0.265** (0.103)
Mother housewife *		
Time	0.401*** (0.039)	0.068*** (0.018)
mean/intercept	24.965*** (2.552)	39.257*** (1.064)
$\sigma^2_{e(ijk)}$	126.67 (11.26)	78.36 (8.85)
$\sigma^2_{f(0j)}$	89.14 (9.44)	45.98 (6.78)
$\sigma^2_{c(0j)}$	27.65 (5.26)	13.97 (3.74)
Log Likelihood	−644961.300	−1768290.000
AIC	1290007.000	3536665.000
BIC	1290425.000	3537129.000

Notes: 1. All continuous independent variables have been centered around the mean. Numbers in parentheses are SEs.

2. We investigated whether having both effects of time linear and period was problematic but it did not change our results.

3. ***p < .001; **p < .01; *p < .05

impact of mothers' occupational status on sons' status attainment was almost invisible in Fig. 5b. The results in Table 5 show that the effect of mothers' occupational status on sons' status attainment was significantly positive in 1810-1820 ($\beta_{mother} = 0.234$, p-2s < 0.001), but in the following decade the effect size dropped by 0.204. The small but positive maternal impact remained relatively stable until the end of nineteenth century. Only in 1890-1900 did the impact of mothers' occupational status on sons' status attainment start to be negative -0.012 (0.234-0.246), and it remained slightly negative until the last decade in our study.

Compared to having an average working mother, as shown in Fig. 5c, the impact of having a housemaker mother on daughters' status attainment was negative in 1810 (Table 5 column two: $\beta_{hm} = -1.47$, p-2s < 0.001). Over time, the influence of having a homemaker mother became less negative. Table 5 shows that the interaction effect between having a housewife mother and time is 0.401 (p-2s < 0.001) and thus from 1847 onward, the influence of having a housemaker mother became positive. For sons, the interaction effect between having a housewife mother and time is not observable in Fig. 5c. But Table 5 shows that for sons, the interaction effect between having a homemaker mother and time is 0.068 (p-2s < 0.001). This means that over time, the advantage of having a homemaker mother over having an average working mother on sons' status attainment became slightly smaller. In 1920, the end of our observation period, the impact of having a homemaker mother was 3.173.

Thus, the modernization hypothesis, which assumes that the positive effects of fathers' and mothers' occupational status became less important to their children's status attainment during modernization, is only supported for the influence of mothers' occupational status on sons' status. The shift-of resources hypothesis that predicts an increasing cross-gender impact of parental status on children's status is supported for daughters' status attainment.

7. Conclusions and discussion

We studied the effects of mothers' occupational and employment status on children's status attainment in the nineteenth and early twentieth century in the Netherlands. Our findings show that mothers' status affected both sons' and daughters' status attainment, albeit for

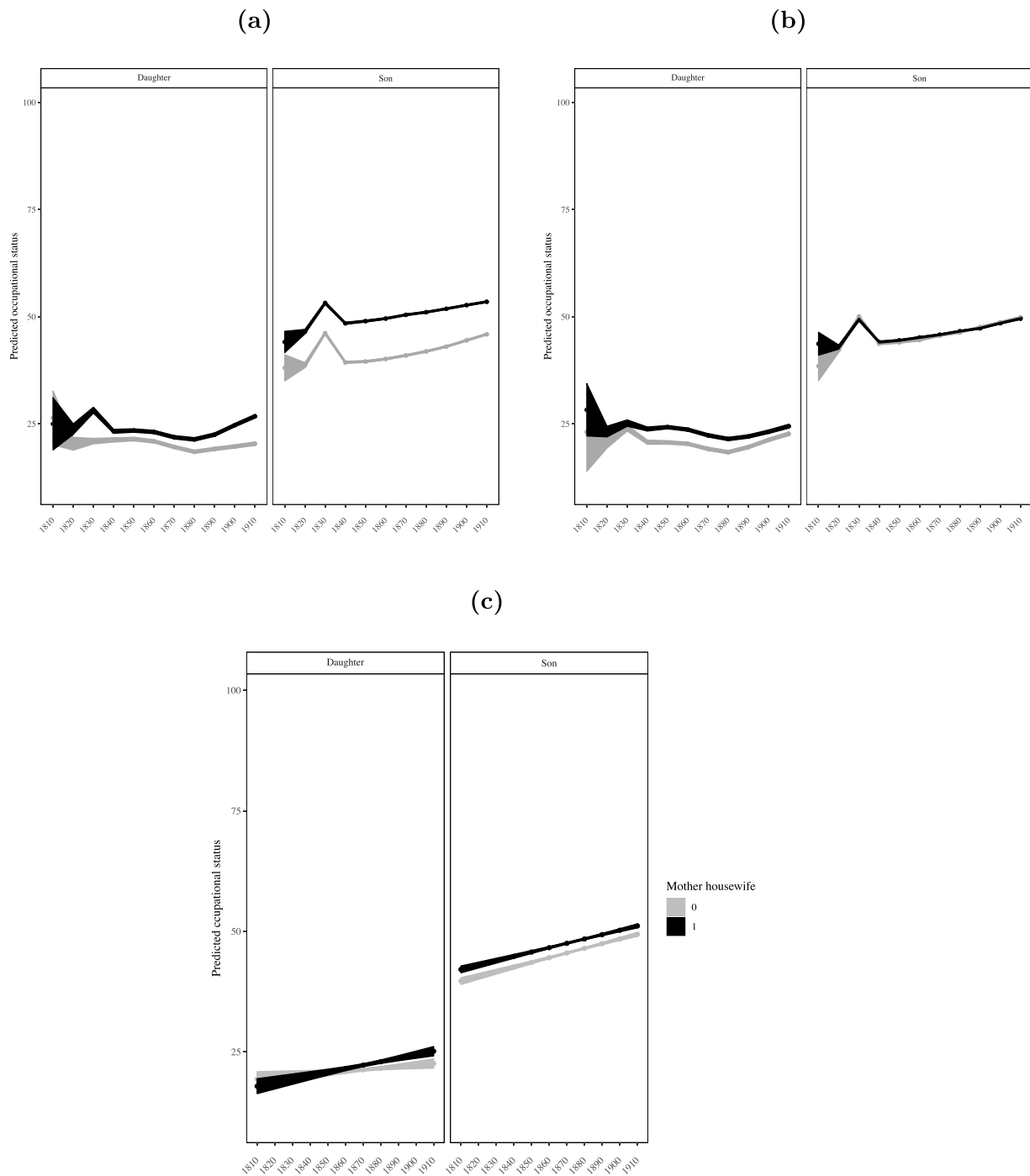


Fig. 5. Interaction effects between fathers' occupational status (a), mothers' occupational (b) and employment (c) status, and time.

Note: 1. In Figure (a) and (b), the upper line refers to 1 s.d. above the mean of fathers' or mothers' occupational status. The bottom line refers to 1 s.d. below the mean of fathers' or mothers' occupational status. 2. 95% CI is added around the lines.

sons, the influence of mothers' status was not substantial. Contrary to the *conventional hypothesis*, which assumes that only fathers' status matters, we show that mothers' and fathers' occupational status each had their own positive effect on children's status attainment, although the impact of fathers' occupational status was always stronger than that of mothers' on sons' and daughters' status attainment. There is unequivocal support for the *individual hypothesis* but the *sex-role hypothesis* is only partially supported as the father-son relationship is by far the strongest.

Moreover, we find that mothers' employment status – whether or not she was a housewife – had an impact on children's status attainment.

Sons and daughters whose mothers were housewives reached a higher occupational status than children of working mothers with an average occupational status. Given that these homemaker mothers were not working and were most likely not bringing in economic resources to the family, their positive influence is probably mainly due to their noneconomic resources. This finding is in line with the *noneconomic resources hypothesis*, and with research showing that in this period housewives were more likely to come from higher status families and thus have some education or have more sophisticated social skills than an average working mother (e.g., Van Poppel et al., 2009). We also investigated the influence of mothers' family background on children's status attainment

when the mother was a housewife. We confirmed that the status of grandparents had a positive impact on children's status, which is in line with empirical findings in multigenerational mobility research (in contemporary society; Chan & Boliver, 2013; in historical context, Knigge, 2016). When the mother was a housewife the status of her parents had a stronger positive impact on children's status attainment than when the mother was working and had an average occupational status. The grandparents were more important when men and women had a homemaker mother. This is in line with the hypothesis that the status of the maternal parents indicates the mothers' noneconomic resources. The instrumental impact of having a housewife mother for the transmission of grandparents' status was overlooked in previous research, which implies that the strength of the influence of grandparents' status on children's status attainment was overestimated for part of the population.

This study also examined changes in parental influences on children's status attainment during the nineteenth and early twentieth century, when modernization processes, such as industrialization and educational expansion, took place in the Netherlands. During modernization the impact of parental status changed differently for boys and girls. According to the *modernization hypothesis*, the importance of family background on one's status attainment should decrease with modernization processes, regardless of the gender of the children. In line with previous studies (Erikson & Goldthorpe, 1992; Knigge et al., 2014; Zijdemans, 2009), we found a rather stable occupational resemblance of fathers' and sons' status with modernization. The resemblance only slightly decreased towards the end of the 19th century. According to the *shift of resources hypothesis*, which we formulated based on Schulz (2015), with modernization an increasing effect of fathers' status on daughters' status attainment was to be expected. With modernization fathers' economic resources became more useful for daughters than before. The scope for a father to invest in his daughters' occupational career increased. He could, for example, pay for a good education. We also expected a smaller increase in the importance of mothers' resources for her sons in the same vein of reasoning. We indeed found an increasing cross-gender effect of parents' status on daughters' status attainment, while for sons, such a cross-gender effect did not appear. This can be explained by the fact that with modernization processes gender-specific occupational knowledge became less important for women's status attainment over time. Women were able to pursue careers that previously were exclusively for men.

Due to the limitations of our data and measurements, some of the conclusions of this study are tentative. First, we studied only daughters who had an occupation, which resulted in having to exclude a large part of the data (sixty percent of the daughters). There are indications, also in our own study, that daughters who had an occupation at marriage in the nineteenth and early twentieth century more often originated from low social status families and probably also often married someone of a similarly low status. Hence, we are most likely to have studied the status transmission from parents to daughters with data in which low status families were over-represented. This is important to bear in mind when interpreting our results. It would be interesting for future research to look into the status attainment of women who were not working at marriage and to disentangle the relations between marital status mobility and occupational status mobility.

Second, we examined the transmission of noneconomic resources by investigating the influence of having a homemaker mother and of the status of the grandparents on the maternal side. This is a rather indirect test of the transmission of noneconomic resources, especially in the late nineteenth and early twentieth century, when the "male-breadwinner" model spread from the higher classes to working-class families. Our assumption that housewives had more noneconomic resources than an average working mother may be questionable in this period. It would be interesting to perform a direct test of the underlying mechanism: the transmission of cultural or social resources to the children. Future research could do so by investigating the influence of parents' educational

attainment or social network on their children's status attainment.

Third, the interplay between the impact of fathers' and mothers' status in the status transmission process deserves more future research. Research in intergenerational status transmission and family structure indicates that having a present and involved mother amplifies the status transmission from parents to children (Biblarz & Stacey, 2010; Biblarz, Raftery, & Bucur, 1997). Our study also suggests that resources of the mother strengthened the status transmission from father to child. This seems to be the case for both mothers' economic resources (occupational status) and noneconomic resources (indicated by homemaker status). The opposite can be true as well: fathers' resources facilitate the status transmission from mothers to child. We only explored this relationship, and future research may reveal how general our findings are.

To conclude, this study has shed light on the influence of mothers' status in a historical context, and shows that mothers mattered for daughters' status attainment in the nineteenth and early twentieth century in the Netherlands. The same was true for sons, albeit to a much lesser extent. The conventional view is not valid in this historical context. Even in a historical context, it is problematic to assume that mother's position in the labor market did not matter for children's status attainment.

This, however, does not mean that either the conventional view or Blau and Duncan's status attainment model are completely inaccurate. The status attainment model and the corresponding conventional theory were derived in a specific period of time, when women's labor force participation was largely restricted with the spread of the "male breadwinner" model. What this study shows is that the conventional view is context specific and cannot be regarded as a fundamental framework for all social mobility research.

Our study also provides an alternative understanding of trends in intergenerational social mobility. The modernization thesis predicts that parental influence on children's status attainment decreases over time. We show that this process in reality is more complex: although the gender-specific influence of parental status remains relatively stable with modernization, the cross-gender impact of parents' status (on daughters' status attainment) becomes increasingly important.

Notes

- 1 The GENLIAS 2007_03 data contain unequal numbers of brides and grooms. We identified 115 cases with a unique entry (i.e. only a bride or only a groom) and 3,154 cases with multiple entries (4, 6, 8). We excluded the unique entries and kept the first entry of bride and groom in the case of multiple entries for the same marriage.
- 2 The period covered in the study is 1810 to 1921. This period covers World War I. Since the Netherlands was neutral during World War I, we expect that the war had little influence on the interpretation of our results.

Declaration of Competing Interest

The authors report no declarations of interest.

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