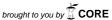
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# The Intergenerational Transmission of Occupational Status and Sex-Typing at Children's Labour Market Entry

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ABSTRACT To what extent do the mother's and father's jobs and occupational sextyping influence the status and sex-typing of their children's occupation at first entry into the labour market? Referring to a database containing 5027 respondents of two merged Dutch surveys held between 1992 and 1995, this study finds that the effect of the mother's occupational status on her daughter's is significant, but smaller than either the effect of father's status on his son's or his daughter's status. The mother's occupational sex-typing is related to her daughter's occupational sex-typing. The more female sex-typed the daughter's occupation, the lower her occupational status. In the same way, the father's occupational sex-typing is related to his son's occupational sex-typing. While the extension of the classical status attainment models by the mother's occupation and occupational sex-typing leads to interesting and new coefficients, the authors conclude that the more elementary classical model is not invalidated by these new perspectives.

KEY WORDS education ♦ first occupation ♦ historical trends ♦ individual model ♦ occupational sex-typing ♦ path model ♦ status attainment

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#### INTRODUCTION

#### Contemplating the Conventional View

In studies on status attainment it has uniformly been confirmed that the occupational status of the father and that of the son are positively associated (Blau and Duncan, 1967; Ganzeboom and de Graaf, 1983; Goldthorpe, 1987; Rijken, 1999). With respect to the Netherlands it has also been confirmed that the total and direct influence of the father on the status attainment of his children has decreased in recent decennia. Simultaneously, the influence of individual achievement, measured by the impact of the children's education, has increased (e.g. de Graaf and Luijkx, 1995). These conclusions on the structure of and trends in parental influence are based on observations of the influence of the father only. The influence of the mother has not yet been considered.

The assumption made in studies on status attainment is that excluding the influence of the mother's job status does not invalidate the empirical model. However, with the increasing labour market participation of mothers, long-standing claims (Acker, 1973) that the mother's status background forms an additional source of intergenerational status transfer are becoming more plausible. The Netherlands is a particularly interesting case because recently mothers' employment rates have risen quite dramatically (CBS, 1994; Korupp, 2000: 5ff.; see Appendix B for female employment rates). It is possible that by including the influence of the mother's occupational background, the standard conclusions regarding the size and trend of intergenerational status transfer may have to be modified. Models that only include the influence of the father's occupation possibly underestimate the total size of intergenerational status transfer. In addition, the trend towards a decreasing impact of family background may be an artefact because thus far we have overlooked the increasingly important influence of the mother's status background. This study therefore investigates the influence of the mother on the occupational status of her children: to what extent do the parameters of the classical status attainment model (Blau and Duncan, 1967) change if the occupational status of the mother is added as a predictor and how does the influence of the mother develop over time? We answer this question not only for Dutch sons but also for Dutch daughters.

Previous empirical results regarding this problem have produced a less homogeneous picture than the one commonly found in research on male mobility. Peschar (1988), in a comparison of parental status transfer in Hungary and the Netherlands, discovers that the status transfer pattern for the mother and the father are essentially the same. He excludes, however, the influence of mothers' occupations in the Dutch population. Therefore, his conclusion may be a misleading one. The exclusionary

practice regarding the influence of the mother's occupation in some cases has even led researchers to conclude that the father has a stronger influence on the daughter and the mother's status background influences her son more than her daughter. They thus suggest that cross-sex effects prevail between parents and children (Holland Baker, 1981; McClendon, 1976).

Studies that do include the influence of the mother's occupational status on the daughter's job show that she has a profound impact (Korupp, 2000; Rosenfeld, 1978; Treiman and Terrell, 1975). A recent study for the USA (Khazzoom, 1997) shows the influence of the mother's occupation to be crucial to explain her daughter's job status later in life; for the daughter, the mother's background is more important than the father's, and maternal influence is greater for the daughter than for the son. This result suggests that we may be examining two separate cases: the male and the female process of status attainment. Other research, although including the effects of the mother's job status, nevertheless deviates from the afore-mentioned findings. Crook (1995) identifies no gender orientation. Aschaffenburg (1995) shows that professionally employed mothers help only professionally employed sons, not daughters.

#### Occupational Sex-Typing and the First Occupational Status

A fact that may complicate the study of the influence of maternal occupation and might explain the varying results is that the occupational distributions of men and women, thus also of fathers and mothers, differ. Only minor differences exist regarding their average occupational status; the most pronounced difference is found in their occupational sex-typing. The sex-typing of an occupation is the ratio of female to male incumbents in a job. Jobs with mainly male incumbents are male sex-typed, whereas jobs with mainly female incumbents are female sex-typed occupations. Frequently, the substance of sex-typed job traits varies qualitatively. It has been suggested that this affects their status evaluation (Faber, 1988). For instance, in computer jobs or in sales and clerical occupations, a negative relationship exists between occupational status and sex-typing (Powers and Holmberg, 1978; Tijdens, 1997). Women's lower pay is often defended on the basis that women's jobs are pleasant, safe and comfortable, as opposed to the noisy, dirty and dangerous male jobs (Jacobs, 1990). Glick et al. (1995: 565) show that male-typed occupational attributes, like 'masculine personality trait requirements' and 'analytical skills' enhance job status.

Underachievement marks many female employment histories and it is often attributed to women's entry into female sex-typed occupations (Dex, 1987; Rosenfeld and Spinner, 1995). Although female-typed occupations clearly have fewer rewards concerning money and promotion,

women continue to work in them (Jacobs, 1990; Jacobs and Steinberg, 1995; Marini, 1989; Xu and Leffler, 1992). Over time the sex-typing of occupations has continued to be a prominent feature of our labour markets. One obvious explanation is that female sex-typed jobs enable women to combine their family obligations with their employment more easily. Daughters possibly follow their mother's example if they see that their mother is working in a sex-typed occupation and conclude that it is a successful strategy for themselves to combine family and work obligations. It may be the case, therefore, that choosing a sex-typed occupation has an intergenerational component, i.e. that sons follow their father's and daughters follow their mother's example. If the transfer of status is related to the transfer of the occupational sex-typing, this implies that the classical model of status transfer underestimates the size of intergenerational status transfer. Studies of intergenerational mobility commonly do not consider the dimension of occupational sex-typing.

We analyse how parental background matters for children's first job status after they finish their school. Various reasons exist for concentrating on the first occupations of children and exempting later jobs. First, most women have held at least one job before they exit from paid employment. Later in life many women interrupt their careers, because of childbirth or family obligations. Second, job status of the first occupation is salient to later career prospects. Earlier studies have shown that a very strong positive relationship exists between initial and later job status (Dronkers and Ultee, 1995). Third, a child's first occupational status is the main connection between the influence of family background, educational investments and the later career. The influence of family background is greatest at the beginning of the career (Blau and Duncan, 1967). Later, it is previous on-the-job performance which becomes increasingly important. Fourth, studying transfer patterns on first jobs simplifies cohort comparisons. The issue at hand is how intergenerational transfer patterns of occupational status and sex-typing change if we add the mother's background to the classical model of status attainment. The focus rests on the following research questions:

- 1. How do the status and sex-typing of the father's and the mother's occupation influence the status and sex-typing of the occupations of daughters and sons?
- 2. How have these relationships changed over time?

#### THEORY AND HYPOTHESES

#### Historical Trends

The starting point of this analysis is a modified version of the classical status attainment model as proposed by Blau and Duncan (1967). The modification consists of excluding the influence of the education of the parents and the current job of the respondent. Previous research in the Netherlands is quite consistent with Blau and Duncan's observation that the father's education has no substantial direct influence on his son's first job status (e.g. de Graaf and Luijkx, 1992). This status transfer path runs exclusively via children's education (for mothers' influence on children's educational attainment, see Korupp, 2000; Korupp et al., forthcoming). Thus, the influence of the educational level of both parents can be neglected when determining parental status transfer on the first occupational status of children.¹ Our model concentrates on the relationships between the following components of the status attainment model: father's and mother's occupation, daughter's and son's education and daughter's and son's first occupation.

Status attainment research in the Netherlands has shown that, over time, total intergenerational status transfer has decreased (Ganzeboom and de Graaf, 1983; Ganzeboom and Luijkx, 1995; Ganzeboom et al., 1989; Hendrickx and Ganzeboom, 1998). Individual achievement by attained educational level, on the other hand, has become increasingly important (de Graaf and Luijkx, 1995; Hendrickx and Ganzeboom, 1998). To explain these results, it can be assumed that modern societies are becoming more open in general (Rijken, 1999). Although several studies show that the influence of the mother's job is non-trivial with regard to children's occupational status locations, the historical trends in her status transfer have received little attention. If the mother's background also matters we can expect that the influence of the mother's occupation on the first occupational status of her children is also decreasing.

On the other hand, according to Lopata (1994), the change of the female role – as more women enter the economic mainstream – has tilted authority and power relationships within the family away from the father towards the mother. Therefore, we can presume that although the influence of the mother's occupational status is decreasing, relative to the influence of the father's occupational status, her impact may have increased. In other words, the impact of both parents is diminishing, but this is less true for mothers than it is for fathers. An empirical study of van der Lippe et al. (1995) carried out for the Netherlands on intergenerational educational reproduction offers some support concerning this hypothesis. They show for birth cohorts born between 1906 and 1965 that the influence of the mother's education, compared with that of the father, on the

educational attainment of their children has recently increased. In conclusion, we state the following hypotheses:

Hypothesis 1a: Over time the influence of both parents' occupational status on

their child's first occupational status is decreasing.

Hypothesis 1b: The influence of the child's education on his or her first occu-

pational status is increasing.

Hypothesis 1c: The influence of the mother's occupational status on the child's

first occupational status is increasing relative to the influence

of the father's occupational status.

#### The Sex-Role Model

The next question is how parental job status and sex-typing influence the status and sex-typing of children's occupations. Do parents serve as a role model not only for the decisions of children regarding their job status but also regarding their job's sex-typing? It has often been suggested that daughters may prefer an occupation more similar to their mother's than their father's job (Pearson, 1983; Rosenfeld, 1978; Stevens and Boyd, 1980). Accordingly, empirical research shows that the size of status transfer differs between sexes, and that the mother's job is more important for the daughter, while the father's job is more important for his son's occupational status.

Within the identification theory, behavioural or attitudinal similarity is explained by the concept that children identify with their same-sex parent on the basis of their supposed expert power (Acock and Yang, 1984; for an overview on mothers and daughters, see Boyd, 1989). Research on how sex-role models are transferred from one generation to the next confirms that children have a strong same-sex orientation (Smith and Self, 1980; Starrels, 1992). In many ways, sons and daughters take their same-sex parent as an example for themselves (e.g. Huttunen, 1992; Updegraff et al., 1996). Thus, children may also tend to follow their parents' example regarding the sex-typing of their occupation. Taken together, the theoretical and empirical evidence leads us to the following hypotheses:

Hypothesis 2: The relationship between the same-sex parent and child is stronger than the relationship between the cross-sex parent and child regarding: (a) occupational status and (b) occupational sextyping.

The entire theoretical model is displayed in Figure 1. The relationships indicated in the shaded area of the model are of particular interest within our research. The relationships found outside the shaded area are controlled in our model.

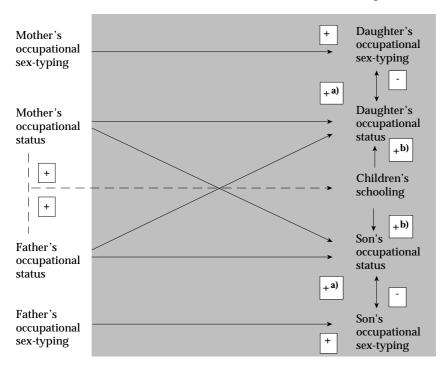


FIGURE 1
Theoretical Model (Shaded Area) and Status Relationships

- a) Decreasing over time.
- b) Increasing over time.

#### DATA AND METHODS

Sources of data available that included an adequate measurement of the mother's occupational status and children's first occupational status were the Households in the Netherlands 1995 (HIN95) survey and the Netherlands Family Survey 1992–1993 (FAM93). The two surveys contained retrospective interviews on occupational careers of both male and female respondents. We selected respondents younger than 64 years, born between 1927 and 1975, with valid data for their first occupation. The remaining database contained 5027 respondents of which 2496 were women and 2531 were men. In the FAM93 survey, the respondents and a randomly selected parent were the units of observation, whereas in the HIN95 the target respondents were married or cohabiting couples and single persons, who also provided information about their parents.

The unit of analysis is the respondent and we studied the degree to

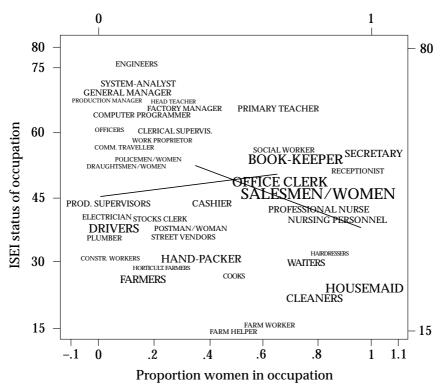
which the status and sex-typing of his or her first job after finishing school depended on the job status and sex-typing of the parents. If beyond the attainment of an educational level a period of at least two years of educational inactivity followed, we defined an educational career as being completed. The first occupation entered after finishing school served as the dependent variable. The mother's occupation was valid if we found information on at least one occupational title she held either during the adolescence of the respondent or, if absent, before her marriage. Otherwise she was regarded as non-actively employed during her entire life (homemakers).

The two dependent variables were the respondent's occupational status and the male to female ratio of her or his first job. The job status was coded by the International Socio-Economic Index (ISEI) of Occupational Status (Ganzeboom and Treiman, 1996). Originally, ISEI codes ranged from 10 to 90. To give occupational sex-typing and status the same 0 to 1 range, we divided the ISEI scale by 100, subtracted 0.1 points, and then multiplied it by a fraction of 1/8. If the mother was a homemaker, she received the value of the overall average maternal occupational status. Simultaneously, she was coded 1 on a separate dummy variable measuring the influence of the homemaker (Cohen and Cohen, 1975: 274ff.).

The score for the occupational sex-typing was calculated from the unweighted data of a large Dutch labour market census (N=47,621) of 1991 carried out by Statistics Netherlands (CBS, 1991). Over time the sex-typing of jobs for men and women seem to have outlasted other changes in the various segments of the labour market (Jacobs and Steinberg, 1995; Tijdens, 1997; van Mourik and Siegers, 1988; van Mourik et al., 1983). The reasons are related partly to the fulfilment of gender stereotypes (Born et al., 1996; Huffman, 1995), or family obligations necessitating part-time work (Jacobs 1990), or educational specialization at school (Tijdens, 1997; van Mourik and Siegers, 1988).

To demonstrate the relationship between occupational status and sextyping Figure 2 shows how the proportion of women in occupational clusters is connected to the status of jobs (measured by a four-digit CBS occupational code from 1984). Only large occupational clusters are shown; the size of the cluster is indicated by the font size of the letters. The regression lines for men (left) and women (right), however, are based on the entire data set. Most women are found on the right-hand side of the figure, most men on the left-hand side. We observe a strong negative relationship between occupational status and female dominance for women: the higher the percentage of women in a job, the lower a woman's occupational status. For men this relationship is weaker and reversed: the more female-dominated an occupational cluster is, the higher the occupational status (see Figure 2). These relationships are best summarized by considering occupational sex-typing to be sex-specific: for





women occupational sex-typing increases as the percentage of females in a job cluster increases; for men occupational sex-typing increases as the percentage of males in a job cluster increases. The occupational status and sex-typing of the mother and the father and the education of the respondent are the most important independent variables in this analysis. Furthermore we introduce a control for respondents who have exactly the same occupation as their same-sex parent.

In Table 1 we show the ranges, means and standard deviations of all variables included in the analysis. Of all the mothers in the data set, 38 percent were homemakers without an occupational score of their own. The fathers' jobs had on average a sex ratio of 81:19 men to women, working in occupations with on average 81 percent male and 19 percent female incumbents. For mothers' jobs we note an average ratio of 29:71 men to women. If we look at the sons and daughters in the data set separately, we notice a slight trend towards on average less sex-typed occupations. Mothers work in jobs with on average 71 percent and daughters

Variable	Ranges	Means	SD	
Occupational status sons	0-1	0.50	0.18	
Occupational status daughters	0-1	0.51	0.17	
Occupational status mother	0-1	0.43	0.13	
Mother is a homemaker	0/1	0.38	_	
Occupational status father	0-1	0.50	0.18	
Occupational sex-typing son	0-1	0.75	0.26	
Occupational sex-typing daughter	0-1	0.69	0.24	
Occupational sex-typing mother	0-1	0.71	0.20	
Occupational sex-typing father	0-1	0.19	0.21	
Son has the same occupation as father	0/1	0.05	_	
Daughter has the same occupation as mother	0/1	0.04	_	
Education respondent	6-17	11.74	2.94	
Year of birth respondent FAM93	27-75	1951	10.68	
Year of birth respondent HIN95	27-75	1955	10.94	

TABLE 1
Ranges, Means and Standard Deviations of the Variables in the Model

Source: FAM93; HIN95.

in jobs with on average 69 percent female incumbents. Sons work in jobs with an average of 75 percent male incumbents, compared with their fathers who work in jobs with 81 percent male incumbents.

Regarding the occupational status of men and women we also see interesting differences between the two generations. While the difference between the average job status between the mother and the father amounts to 7 points (43 and 50), the average occupational status of the first job of daughters is slightly higher, compared to sons (51 for daughters, 50 for sons).

The education of the respondent was measured as a year-proxy variable. The value of this variable was based on the approximate number of years it would take a student to attain a certain educational level in the Dutch educational system. Only 5 percent of the sons and 4 percent of the daughters had held exactly the same job as their mother or father at entry into the labour market. We judged children to have exactly the same occupation as their parents if the four-digit CBS code for their occupational title of the same-sex parent and child was identical. The latter variable was introduced in order to contrast the effects of mobile parent-child dyads with immobile children-parent dyads. It enables us to control the direct effects of immobility.

We estimated a path model in LISREL that related the causal effects of the independent variables on the two dependent variables and between the two dependent variables (Jöreskog and Sörbom, 1993). One has to account for the fact that individuals attain both their occupational sextyping and status simultaneously. It is undetermined whether occupational status influences occupational sex-typing, or vice versa. The

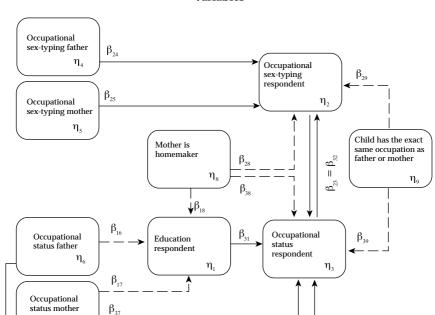


FIGURE 3
LISREL Model Displaying the Paths Between the Dependent and Independent
Variables

effects of occupational sex-typing and status were therefore estimated simultaneously (see Figure 3). The correlation matrices used in the analysis are presented in Appendix A.

#### **RESULTS**

 $\eta_7$ 

 $\beta_{36}$ 

The first analysis is directed to answering the question whether the initial analytical choice to distinguish old from young cohorts is statistically required. In Table 2 we have constrained the parameters of the LISREL model so that the two cohorts are equal. The aim was to investigate whether, between the groups, the parameters were equally important or differed significantly. A significant improvement of the  $\chi^2$  in the table shows that the influence of one parameter was significantly different in one group as opposed to the other. For sons, the model fit did not significantly improve for any of the variables measuring status background if we modelled them separately over two cohorts.

For daughters we observe a significant deterioration of the model fit if effects were forced to be equal between the two cohorts for the following

TABLE 2 Equality Constraints and Fit Statistics for Daughters and Sons, Cohort 1927–58 and Cohort 1959–75

Unconstrained parameter		Daughters 1927-58:1959-75		Sons 1927–58:1959–75	
	d.f.	$\chi^2$	$\Delta \chi^{2a}$	$\chi^2$	$\Delta \chi^{2a}$
None	27	89.04	_	49.70	_
(β37) Mother's occupational status => Respondent's occupational status $(β36)$ Father's occupational status	26	86.58	2.46	46.67	3.03
=> Respondent's occupational status (β <sub>17</sub> ) Mother's occupational status	26	76.42	12.62	49.27	0.43
= > Respondent's education $(\beta_{16})$ Father's occupational status	26	88.17	0.87	49.10	0.60
= > Respondent's education $(\beta_{31})$ Respondent's education	26	78.98	10.06	49.14	0.56
=> Respondent's occupational status (β <sub>25</sub> ) Mother's job sex-typing	26	66.40	22.64	46.52	3.18
=> Respondent's job sex-typing (β <sub>24</sub> ) Father's job sex-typing	26	88.81	0.23	48.86	0.84
=> Respondent's job sex-typing (β <sub>23=32</sub> ) Respondent's job sex-typing	26	88.03	1.01	48.71	0.99
<=> Respondent's occupational status	26	84.20	4.84	46.90	2.80
Control variables $(\beta_{38})$ Mother is a homemaker					
=> Respondent's occupation (β <sub>28</sub> ) Mother is a homemaker	26	81.36	7.68	49.14	0.56
=> Respondent's job sex-typing (β <sub>18</sub> ) Mother is a homemaker	26	88.99	0.05	47.75	1.95
=> Respondent's education (β <sub>39</sub> ) Same job as the same-sex parent	26	89.04	0.00	49.61	0.09
=> Respondent's job $(\beta_{29})$ Same job as the same-sex parent	26	88.60	0.44	46.51	3.19
=> Respondent's job sex-typing	26	88.61	0.43	49.70	0.00

a = 3.84 = p < .05; 6.63 = p < .01.

Source: FAM93; HIN95.

variables: the effect of father's occupational status on daughter's occupational status ( $\beta_{36}$ ) and the daughter's education ( $\beta_{16}$ ), of the daughter's education on the daughter's occupational status ( $\beta_{31}$ ), of the daughter's occupational sex-typing on her occupational status ( $\beta_{23=32}$ ), and of one control variable, which was the effect of mothers who were homemakers on the daughter's occupational status ( $\beta_{38}$ ). These variables are hereafter allowed to vary over the two cohorts of daughters.

#### Historical Trends

In Table 3 we show the beta coefficients and T-values of the LISREL model. We used the correlation matrices of the four cohorts; the coefficients are displayed in a standardized metric format. We selected which of the coefficients can be constrained between the two cohorts in order to obtain the most efficient model. The selected models fit the data well. Therefore, we do not have to assume that additional effects have to

TABLE 3
Beta Values and T-Values for Paths in the Model

	Daug	Sons	
	1927-58	1959-75	1927-75
(β37) Mother's occupational status => Respondent's occupational status $(β36)$ Father's occupational status	.063	.026 (1.6)	
=> Respondent's occupational status $(\beta_{17})$ Mother's occupational status	.146 (5.8)**	.073 (2.8)**	.135 (7.7)**
=> Respondent's education (β <sub>16</sub> ) Father's occupational status	ucation .128 (6.4		.139 (7.0)**
=> Respondent's education (β <sub>31</sub> ) Respondent's education	.334 (12.2)**	.215 (7.6)**	.207 (13.6)**
=> Respondent's occupational status (β <sub>25</sub> ) Mother's job sex-typing	.438 (16.9)**	.304 (11.5)**	.473 (24.5)**
=> Respondent's job sex-typing (β <sub>24</sub> ) Father's job sex-typing	.043 (	(2.3)*	.008 (0.5)
=> Respondent's job sex-typing $(\beta_{23=32})$ Respondent's job sex-typing	.034 (	,	.068 (3.7)**
<=> Respondent's occupational status	254 (5.4)**	329 (4.9)**	231 (5.4)**
Control variables (β <sub>38</sub> ) Mother is a homemaker			
=> Respondent's occupation $(\beta_{28})$ Mother is a homemaker	080 (3.5)**	017 (0.7)	056 (3.8)**
=> Respondent's job sex-typing $(\beta_{18})$ Mother is a homemaker	.017	(0.9)	.032 (1.6)
=> Respondent's education (β <sub>39</sub> ) Same job as the same-sex parent	120 (	(6.3)**	150 (8.4)**
=> Respondent's job $(\beta_{29})$ Same job as the same-sex parent	047 (		047 (2.8)**
=> Respondent's job sex-typing	.052 (	.040 (2.0)*	
$d.f.$ $\chi^2$		22 47.48	27 49.70
N N	1209	1287	2531

<sup>\*</sup> *p* < .05; \*\* *p* < .01. *Source*: FAM93; HIN95.

be included in the model. Some of the remaining effects, however, are not significantly different from 0.

We have assumed in Hypothesis 1a, in line with earlier findings, that the overall direct influence of parental status on the occupational status of the children has decreased over time. To test this hypothesis we study the size of  $\beta_{36}$  – the influence of the occupational status of the father – and  $\beta_{37}$  – the influence of the mother's occupational status. The direct status transfer of the mother is small, .063 for daughters and almost zero (and non-significant) for sons.

The influence of the father is greater for sons than for daughters, but decreases only for daughters. It decreases to half its size from .146 for the oldest to .073 for the youngest cohort of daughters. The influence of the father's on the son's occupational status remains stable between the two cohorts (.135).

Regarding the education of sons and daughters, we see that the influence of the father's job status is on average twice as high as the influence of the mother's job status. Over the two cohorts we note a significant reduction in the influence of the father's occupational status again only with regard to his daughter's educational level. The influence of both parents on their son's educational attainment remains stable.

Hypothesis 1b holds that the influence of the child's own education increases over time. Therefore, we should note an increase of the beta coefficient  $\beta_{31}$ , the influence of the respondent's education on the status of the first occupation.

Obviously, this is the case for neither daughters nor sons. For sons we see that the influence of his education remains stable (.473), whereas for daughters we even notice a significant reduction of the influence of her education (from .439 to .304). The empirical evidence thus rejects Hypothesis 1b. We do not find that the influence of one's own education on the first occupational status has increased throughout the cohorts.

Hypothesis 1c holds that relative to the influence of the father, the influence of the mother's occupational status increases over time. If we compare then  $\beta_{37}$  (mother's occupational influence) with  $\beta_{36}$  (father's occupational influence) for the daughters, Hypothesis 1c is confirmed. The influence of the mother's job is altogether non-significant with regard to her son's first occupational status. The influence of the father's job status remains stable between the two cohorts of sons.

#### The Sex-Role Model

We now test the second hypothesis: the relationship between the occupational status (Hypothesis 2a) and sex-typing (Hypothesis 2b) of the parent and the child is stronger between same-sex than between cross-sex parents. Here we have extended the model shown in Figure 3 to include

the occupational sex-typing of the parents and the children. The results are shown in Table 3.

Regarding the influence of the occupational status we already have observed a confirmation of the expected same-sex relationship. We find no significant influence of the mother's occupational status on the first job status of her son; only for daughters does the status of her job make a significant difference. The influence of the father is on average greater on the first job status of his son than on the first job status of his daughter.

The relationship  $\beta_{25}$  between the occupational sex-typing of the mother on the occupational sex-typing of her daughter is small, but significant (.043), while it is non-significant for her son. If on average more women than men work in the occupation of the mother, the likelihood of the daughter imitating her mother's choice of a female sex-typed occupation increases significantly.

We also find a positive and significant influence of the father's occupational sex-typing on the sex-typing of his son's first job ( $\beta_{24}$ ) namely a figure of .068. Consequently, the likelihood of sons choosing a male sex-typed occupation is higher if his father has worked in a male sex-typed occupation. The influence of the occupational sex-typing of the father is non-significant for the occupational sex-typing of his daughter. Our second hypothesis receives, therefore, full empirical confirmation. Not only the transfer of occupational status but also the transfer of occupational sex-typing is greater between same-sex parent–child dyads than it is between cross-sex parent–child dyads.

Regarding the relationship between the respondent's occupational status and sex-typing ( $\beta_{23=32}$ ), Table 3 indicates that over time it has become more negative for women, dropping from -.254 in the older cohort to -.329 in the younger cohort, whereas for men it remains stable at -.231. In other words, for men as well as for women it is true that their choice in favour of a sex-typed occupation goes hand in hand with a choice for a lower job status. Over time, this relationship has become stronger for women. Yet, although the intergenerational transfer of occupational sex-typing is significant, it is not very strong. Therefore, the effect of parental occupational status, is less relevant for the explanation of children's occupational status attainment.

#### CONCLUSIONS AND DISCUSSION

This study investigates how the relationships within the classical model of status attainment (Blau and Duncan, 1967) for children's first occupation status change if we add the status background of the mother to the analysis. The question was whether we also need to consider the

occupational sex-typing of jobs if we consider mothers in the analysis of status attainment. The study has yielded several interesting results.

The first conclusion is that we find intergenerational transfer of occupational status and occupational sex-typing, but the strength of the status relationships far outweighs the strength of intergenerational relationships of occupational sex-typing. Despite the relatively strong relationship between sex-type and status of children's occupations, our extension of the intergenerational occupational status attainment model with occupational sex-typing has not much influence on how the occupational status transfer between parents and children is estimated. The intergenerational transfer of the sex-typing of an occupation is rather small.

Our second conclusion is that for both transfer relationships, occupational status and sex-typing, there is more same-sex than cross-sex intergenerational transfer. Daughters follow their mother's and sons follow their father's example. The transfer of occupational sex-typing even is entirely same-sex specific. By contrast, the father's occupational status also seems to affect his daughter's job status, while the mother's job status is non-significant to her son's occupational status.

A third conclusion is that the impact of the mother is weaker than the impact of the father, for sons as well as for daughters. The fourth conclusion is that the expected reduction of parental influence over time, i.e. for the two cohorts we have studied here, was only partly supported. Merely for the daughter's status attainment, not the son's, the impact of status transfer decreased. As the influence of the father on the daughter is reduced over time, we are able to show that relative to the father, the mother's impact becomes more important for daughters. This conclusion is in line with what was established earlier regarding the influence of the mother's educational level on sons' and daughters' educational levels (van der Lippe et al., 1995).

Our fifth and last conclusion is that although we discovered interesting and significant relationships by extending the model and including the transfer of occupational sex-typing, the results of the conventional model of status attainment (including only father's status transfer) have not been invalidated. Given that the extension of our model results in an empirical test that includes more variables with a reduced set of data than captured in the male-based research, both analytical strategies, the extended and conventional methods, have their advantages as well as their disadvantages.

Our results regarding the historical trends of parental status transfer are not in line with what has been found earlier for the Netherlands (de Graaf and Luijkx, 1992; Hendrickx and Ganzeboom, 1998 [with older data]). First, we find a reduced influence of parental occupational status only for the effects of fathers on daughters, while earlier research has shown that this also applies to the relationships between fathers and sons. Second,

our results do not indicate that the educational level of children is becoming increasingly important for their first occupational status. For daughters the trends even are opposite. The influence of the daughter's educational level on her first job has recently been less strong.

There are several possibilities that may offer an explanation for our contradicting results. By extending the model to also include the mother's occupational status, and by modelling children's first occupational status only, our choice of adequate data sets was considerably narrowed down. Our database is smaller and covers a more recent period than previous research. Therefore, our conclusions may differ from previous studies that have based their conclusions on older data.

More importantly, we concentrate on the first occupational status of children after they have finished their education (and control very strictly for this), while earlier research studied current occupational levels and controlled for the influence of children's labour market experience on their current jobs. Nonetheless, the possibility that the results found here hold for the most recent period studied cannot be excluded. Rijken (1999), in her comparative study on the classical model of status attainment, also shows that the correlation between children's education and first occupational status has been decreasing throughout history in the Netherlands. The explanation she offers is that the increasing homogenization of educational levels – observed by the decreasing standard deviation of the educational level in the population – results in less variation and lower correlations between education and the first occupational status in recent times. This explanation is tentative and calls for further investigation.

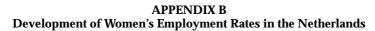
With respect to the sex-role model, our results underline a same-sex orientation in parent-child dyads. For occupational status as well as for occupational sex-typing, we find strong orientations of daughters towards their mothers and sons towards their fathers. Thus, the empirical evidence underlines the existence of a sex-role model. Nevertheless, although sons as well as daughters are oriented towards their same-sex parent, children rarely choose exactly the same occupation as their samesex parent. It would be a fruitful future research area to take a closer look at the psychological patterns underlying the process of sex-role orientation. For example, including family socialization factors may yield what otherwise determines the choice of an individual to work in a sex-typed occupation. In the end, the occupational status of the mother has a greater impact on the occupational status of her daughter compared with her son. The conclusions of the current study are based on empirical results for the Netherlands. Further research should concentrate on the influence of the mother in an internationally comparative perspective.

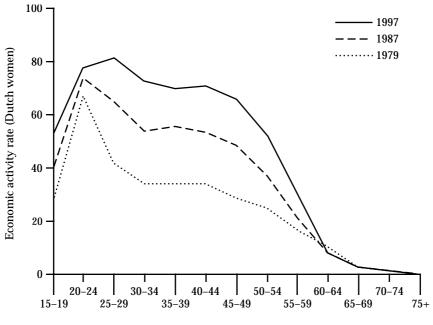
#### **APPENDICES**

Appendix A Correlation Matrices

(η <sub>1</sub> )	(η <sub>2</sub> )	(η <sub>3</sub> )	(η <sub>4</sub> )	(η <sub>5</sub> )	(η <sub>6</sub> )	(η <sub>7</sub> )	(η <sub>8</sub> )	(η <sub>9</sub> )	
Women Birth Cohort 1927–58									
1.000	162	.563	076	010	.395	.226	144	071	
162	1.000	280	004	.049	059	042	.034	.088	
.563	280	1.000	079	027	.373	.220	159	093	
076	004	079	1.000	.044	141	095	.046	009	
010	.049	027	.044	1.000	.002	370	048	.094	
.395	059	.373	141	.002	1.000	.338	139	.011	
.226	042	.220	095	370	.338	1.000	.101	.018	
144	.034	159	.046	048	139	.101	1.000	196	
071	.088	093	009	.094	.011	.018	196	1.000	
Women Birth Cohort 1959–75									
1.000	137	.381	150	030	.280	.224	171	058	
137	1.000	299	032	.069	051	080	.048	.061	
.381	299	1.000	075	048	.202	.177	090	065	
150	032	075	1.000	014	187	115	.080	031	
030	.069	048	014	1.000	039	296	.023	.027	
.280	051	.202	187	039	1.000	.377	139	.026	
.224	080	.177	115	296	.377	1.000	087	.044	
171	.048	090	.080	.023	139	087	1.000	122	
058	.061	065	031	.027	.026	.044	122	1.000	
			Men Birt	th Cohort	1927-58				
1.000	154	.584	099	.030	.337	.199	137	106	
154	1.000	203	.105	.024	106	020	.044	.066	
.584	203	1.000	113	018	.335	.194	129	156	
099	.105	113	1.000	.053	145	126	.038	.009	
.030	.024	018	.053	1.000	053	327	021	027	
.337	106	.335	145	053	1.000	.347	044	115	
.199	020	.194	126	327	.347	1.000	.138	026	
137	.044	129	.038	021	044	.138	1.000	.048	
106	.066	156	.009	027	115	026	.048	1.000	
Men Birth Cohort 1959–75									
1.000	125	.532	101	046	.323	.263	206	084	
125	1.000	089	.071	.010	090	081	.110	.082	
.532	089	1.000	110	.026	.314	.179	200	082	
101	.071	110	1.000	.005	181	070	.090	.046	
046	.010	.026	.005	1.000	001	260	022	027	
.323	090	.314	181	001	1.000	.347	136	109	
.263	081	.179	070	260	.347	1.000	099	041	
206	.110	200	.090	022	136	099	1.000	.014	
084	.082	082	046	027	109	041	.014	1.000	
.001	.002	.502	.010	.021	.100	.011	.011	1.000	

Notes:  $(\eta_1)$  Respondent's education,  $(\eta_2)$  Respondent's job sex-typing,  $(\eta_3)$  Respondent's occupational status (ISEI),  $(\eta_4)$  Father's job sex-typing,  $(\eta_5)$  Mother's job sex-typing,  $(\eta_6)$  Father's occupational status (ISEI),  $(\eta_7)$  Mother's occupational status (ISEI),  $(\eta_8)$  Mother is a homemaker,  $(\eta_9)$  Respondent has exactly the same occupation as same-sex parent. Source: FAM93; HPN953ded from ejw.sagepub.com at Vrije Universiteit 34820 on April 2, 2011





Source: ILO (1980, 1989-90, 1998).

#### NOTES

- Because so far this assertion is tested mainly in male stratification models (for an exception, see Treiman and Terrell, 1975), one should be careful to conclude that the link between fathers and sons is the same as between mothers and daughters. We thank an anonymous reviewer for this suggestion. However, an empirical test on our own data (table not shown) underscored the non-existence of a status transfer path between children's occupational status of either sex and the education of either of their parents.
- 2. We also controlled for the respondent who held exactly the same entry job as their cross-sex parent, but they were by far outnumbered by children with same-sex identical jobs. Altogether, 6.8 percent (265) of the respondents had the same job as either the father or the mother. Yet, females followed their mother's example in 78 percent (100) of all cases and males followed their father's example in 83 percent (115) of all cases.

#### **BIBLIOGRAPHY**

Acker, J. (1973) 'Women and Social Stratification: A Case of Intellectual Sexism', American Journal of Sociology 78: 936–45.

- Acock, A. and W.S. Yang (1984) 'Parental Power and Adolescents' Parental Identification', *Journal of Marriage and the Family* 46: 487–95.
- Aschaffenburg, K.E. (1995) 'Rethinking Images of the Mobility Regime: Making a Case for Women's Mobility', *Research on Social Stratification and Mobility* 14: 201–35.
- Bakker, B.F.M. and P.G.J. Cremers (1994) 'Gelijke kansen in het onderwijs? Een vergelijking van vier cohorten leerlingen in hun overgang naar het voortgezet onderwijs' [The Same Chance for an Education? A Comparison of the Transition into High School of Four Cohorts of Students], Tijdschrift voor Onderwijsresearch 19: 191–203.
- Blau, P.M. and O.D. Duncan (1967) *The American Occupational Structure.* New York: The Free Press.
- Born, C., H. Krüger and D. Lorenz-Meyer (1996) *Der unentdeckte Wandel. Annäherung an das Verhältnis von Struktur und Norm im weiblichen Lebenslauf*[The Unseen Change: Nearing the Relation Between Structure and Norm in Female Biographies]. Berlin: Sigma.
- Boyd, C.J. (1989) Mothers and Daughters: A Discussion of Theory and Research, Journal of Marriage and the Family 51: 291–301.
- CBS (Centraal Bureau voor de Statistiek) (1991) 'Enquête beroepsbevolking 1991 (EBB)' [Labour Census 1991], (data). Voorburg/Heerlen.
- CBS (Centraal Bureau voor de Statistiek) (1994) *Relatie en gezinsvorming in de jaren negentig*. [Relationships and Family Formation in the 90's]. Heerlen/Vorburg: CBS.
- Cohen, J. and P. Cohen (1975) Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences. Hillsdale, NJ: Lawrence Erlbaum.
- Crook, C.J. (1995) 'The Role of Mothers in the Educational and Status Attainment of Australian Men and Women', *Australian and New Zealand Journal of Sociology* 31: 31–73.
- De Graaf, P.M. and R. Luijkx (1992) 'Trends in Status Attainment in the Netherlands from Ascription to Achievement', pp. 437–486 in H.A. Becker and P.L.J. Hermkens (eds) *Solidarity of Generations*. Amsterdam: Thesis.
- De Graaf, P.M. and R. Luijkx (1995) 'Paden naar succes: geboorte of diploma's?' [Pathways to Success: A Right of Birth or Degrees?], pp. 31–45 in J. Dronkers and W.C. Ultee (eds) *Verschuivende ongelijkheid in Nederland. Sociale gelaagdheid en mobiliteit.* Assen: Van Gorcum.
- Dex, S. (1987) Women's Occupational Mobility. A Lifetime Perspective. London: Macmillan Press.
- Dronkers, J. and W.C. Ultee (1995) 'Herkomst en bestemming: vrijheden en de politiek; een terugblik' [Origin and Destiny: Freedom and Politics; a Review], pp. 303–25 in J. Dronkers and W.C. Ultee (eds) *Verschuivende ongelijkheid in Nederland. Sociale gelaagdheid en mobiliteit*. Assen: Van Gorcum.
- Faber, F. (1988) 'Een wet van niks? Een empirisch onderzoek naar de relatie tussen sekse en beroepsprestige' [A Law for Nothing? An Empirical Study of the Relation between Gender and Occupational Prestige], *Mens en Maatschappij* 63: 366–82.
- Ganzeboom, H.B.G. and P.M. de Graaf (1983) 'Beroepsmobilititeit Tussen Generaties in Nederland in 1954 en 1977' [Occupational Mobility Between Generations in the Netherlands in 1954 and 1977], *Mens en Maatschappij* 58: 28–52.
- Ganzeboom, H.B.G. and R. Luijkx (1995) 'Intergenerationele beroepsmobiliteit in Nederland: patronen en historische veranderingen' [Intergenerational Occupational Mobility in the Netherlands: Patterns of Historical Change],

- pp. 14–30 in J. Dockers and W.C. Ultee (eds) Verschuivende ongelijkheid in Nederland. Sociale gelaagdheid en mobiliteit. Assen: Van Gorcum.
- Ganzeboom, H.B.G. and D.J. Treiman (1996) 'Internationally Comparable Measures of Occupational Status for the 1988 International Standard Classification of Occupations', *Social Science Research* 25: 201–39.
- Ganzeboom, H.B.G., R. Luijkx and D.J. Treiman (1989) 'Intergenerational Class Mobility in Comparative Perspective', *Research in Social Stratification and Mobility* 8: 3–84.
- Ganzeboom, H.B.G., P.M. de Graaf and D.J. Treiman (1992) 'A Standard International Socio-Economic Index of Occupational Status', *Social Science Review* 21: 272–88.
- Ganzeboom, H.B.G., S. Rijken and R. Weygold (1993) 'Codeboek Familie-Enquête Nederlandse Bevolking 1992–1993' [Codebook of the Survey of Families in the Netherlands], ICS Occasional Papers and Documents Series, ICS Code Books No. 17, Utrecht.
- Glick, P., K. Wilk and M. Perreault (1995) 'Images of Occupations: Components of Gender and Status in Occupational Stereotypes', *Sex Roles* 32: 565–82.
- Goldthorpe, J.H. (1987) Social Mobility and Class Structure in Modern Britain. Oxford: Clarendon Press.
- Hendrickx, J. and H.B.G. Ganzeboom (1998) 'Occupational Status Attainment in the Netherlands, 1920–1990. A Multinomial Logistic Analysis', *European Sociological Review* 14: 387–403.
- Holland Baker, M. (1981) 'Mother's Occupation and Children's Attainments', *Pacific Sociological Review* 24: 237–54.
- Huffman, M.L. (1995) 'Organizations, Internal Labor Market Policies, and Gender Inequality in Workplace Supervisory Authority', Sociological Perspectives 38: 381–97.
- Huttunen, J. (1992) 'Father's Impact on Son's Gender Role Identity', *Scandinavian Journal of Educational Research* 36: 251–60.
- ILO (International Labor Office) (1980) International Labor Statistics. Geneva: OECD.
- ILO (International Labor Office) (1989–90) International Labor Statistics. Geneva: OECD.
- ILO (International Labor Office) (1998) International Labor Statistics. Geneva: OECD.
- Jacobs, J.A. (1990) 'The Sex-Segregation of Occupations has a Circulating System', pp. 183–207 in R.L. Breiger (ed.) Social Mobility and Social Structure. Cambridge: Cambridge University Press.
- Jacobs, J.A. and J. Steinberg (1995) 'Further Evidence on Compensating Differentials and the Gender Gap in Wages', pp.93–123 in J.A. Jacobs (ed.) *Gender Inequality at Work*. Thousand Oaks, CA, London and New Delhi: Sage.
- Jöreskog, K.G. and D. Sörbom (1993) *LISREL 8*. Chicago: Scientific Software International.
- Kalmijn, M., W. Bernasco and J. Weesie (1996) 'Codeboek Huishoudens in Nederland 1995' [Codebook of Households in the Netherlands 1995], ISCORE Papers No. 67, Universiteit Utrecht.
- Khazzoom, A. (1997) 'The Impact of Mothers' Occupation on Children's Occupational Mobility', *Research in Social Stratification and Mobility* 15: 57–89.
- Korupp, S.E. (2000) *Mothers and the Process of Stratification* (Dissertation, Utrecht University). Amsterdam: Thesis Publishers.
- Korupp, S.E., H.B.G. Ganzeboom and T. van der Lippe (forthcoming) 'Do Mothers Matter? A Model Comparison for the Influence of Father's and Mother's

- Education and Occupational Status on Children's Educational Attainment', *Quality and Quantity.*
- Lopata, H.Z. (1994) Circles and Settings. Role Changes of American Women. Albany: State University of New York Press.
- McClendon, M.J. (1976) 'The Occupational Status Attainment Processes of Males and Females', *American Journal of Sociology* 41: 52–64.
- Marini, M. Mooney (1989) 'Sex Differences in Earnings in the United States', Annual Review of Sociology 15: 343–80.
- Pearson, J. (1983) 'Mothers and Daughters: Measuring Occupational Inheritance', Sociology and Social Research 67: 204–17.
- Peschar, J.L. (1988) Zo vader zo zoon, zo moeder zo dochter? Vergelijkende analyses naar de processen van statusverwerving en onderwijsmobiliteit in Nederland, Hongarije en Polen. [As Father as Son, As Mother as Daughter? A Comparative Analyses of the Process of Status Attainment in Educational Mobility in the Netherlands, Hungary and Poland]. Lisse: Swets and Zeitlinger.
- Powers, M.G. and J.J. Holmberg (1978) 'Occupational Status Scores: Changes Introduced by the Inclusion of Women', *Demography* 15: 183–204.
- Powell, B. and J.A. Jacobs (1983) 'Sex and Consensus in Occupational Prestige Ratings', *Sociology and Social Science Research* 67: 392–404.
- Rijken, S. (1999) Educational Expansion and Status Attainment. A Cross-National and Over-Time Comparison (Dissertation, Utrecht University). Amsterdam: Thesis Publishers.
- Rosenfeld, R.A. (1978) 'Women's Intergenerational Occupational Mobility', American Journal of Sociology 43: 36–46.
- Rosenfeld, R.A. and K.I. Spinner (1995) 'Occupational Sex-Segregation and Women's Early Career Job Shifts', pp. 231–58 in J.A. Jacobs (ed.) *Gender Inequality at Work*. Thousand Oaks, CA: Sage.
- Smith, M.D. and G.D. Self (1980) 'The Congruence Between Mother's and Daughter's Sex-Role Attitudes: A Research Note', *Journal of Marriage and the Family* 42: 105–9.
- Starrels, M.E. (1992) 'Attitudes Similarity Between Mothers and Children Regarding Maternal Employment', *Journal of Marriage and the Family* 54: 91–103.
- Stevens, G. and M. Boyd (1980) 'The Importance of Mother: Labor Force Participation and Intergenerational Mobility of Women', Social Forces 59: 186–99.
- Tijdens, K. (1997) 'Gender Segregation in the IT Occupations', pp. 449–62 in A.F. Grundy (eds) *Women, Work, and Computerization*. Berlin, Heidelberg and New York: Springer.
- Treiman, D.J. and K. Terrell (1975) 'Sex and the Process of Status Attainment: A Comparison of Working Women and Men', American Sociological Review 40: 174–200.
- Tyree, A. and R. Hicks (1988) 'Sex and the Second Moment of Prestige Distributions', *Social Forces* 66: 1028–37.
- Ultee, W.C. and H.B.G. Ganzeboom (1993) 'Netherlands Family Survey 1992–1993' (data). Nijmegen: ICS.
- Updegraff, K.A., S.M. McHale and A.C. Crouter (1996) 'Gender Roles in Marriage: What Do They Mean for Girls' and Boys' School Achievement?', *Journal of Youth and Adolescence* 25: 73–88.
- Van der Lippe, T., M. van Dam and H.B.G. Ganzeboom (1995) 'De tweede sekse in stratificatie-onderzoek. De invloed van de moeder op de kinderen naast die van de vader' [The Second Sex in Research on Stratification. The Influence of the Mother on Children, Next to the Father], *Mens en Maatschappij* 70: 41–53.

- Van Mourik, A. and J.J. Siegers (1988) 'Ontwikkeling in de beroepssegregatie tussen mannen en vrouwen, 1971–1985' [Developments in Occupational Segregation Between Men and Women, 1971–1985] *Economisch Statistische Berichten* 73: 732–7.
- Van Mourik, A., T.J. de Poel and J.J. Siegers (1983) 'Ontwikkeling in de beroepssegregatie tussen mannen en vrouwen in de jaren zeventig' [Developments in Occupational Segregation Between Men and Women in the Seventies], *Economisch Statistische Berichten* 68: 597–601.
- Veldman, A.G. (1991) 'Functiewaardering, vrouwenarbeid en het recht' [Payrolls, Women's Work and the Law], *Tijdschrift voor Arbeidsvraagstukken* 2: 32–43.
- Weesie, J., M. Kalmijn, W. Bernasco and D. Giesen (1995) 'Huishoudens in Nederland 1995' [Households in the Netherlands 1995] (data). Utrecht: ISCORE.
- Xu, W. and A. Leffler (1992) 'Gender and Race Effects on Occupational Prestige, Segregation, and Earnings', Gender and Society 6: 376–92.
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