

## PDF hosted at the Radboud Repository of the Radboud University Nijmegen

The following full text is a publisher's version.

For additional information about this publication click this link.

<http://hdl.handle.net/2066/28411>

Please be advised that this information was generated on 2017-12-05 and may be subject to change.

# Husband's and Wife's Culture Participation and their Levels of Education: A Case of Male Dominance?

*Michel Van Berkel and Nan Dirk De Graaf*  
*University of Nijmegen*

In this study we seek to broaden the debate on women and class analysis to married women's and men's educational attainment, and its impact on cultural behaviour. Analogous to the earlier discussion, the question is raised whether the husband's education dominates his wife's behaviour. First, to examine spouses' interdependent cultural behaviour, we apply a simultaneous equation model. Our analysis, based on longitudinal data from Dutch household surveys, shows some evidence of a declining male dominance across cohorts. The findings also suggest that the total effect of the wife's education on her husband's cultural behaviour has increased over time. Second, we apply diagonal reference models to study educationally mixed couples more elaborately by testing several interaction effects. Although both women's and men's relative positions are associated with a differential salience of the spouse's education, there is no evidence indicating that the lower educated spouse is primarily 'borrowing' from his or her higher educated partner. Instead of such a 'status maximization' effect the higher educated spouse adapts more strongly to the lower educated spouse. In particular, women in the oldest cohort seem to be characterized by this 'status minimization'. The theoretical implications of these findings are discussed.

*Michel Van Berkel, University of Nijmegen, Department of Sociology, P.O. Box 9104, 6500 HE Nijmegen, The Netherlands.*

In a recent review of the literature Sørensen (1994) summarized some major insights from the debate on women and class analysis. Initially, this debate undoubtedly reflected the feminist critique on the exclusion of women from stratification research (Acker 1973). Later, challenged by increasing levels of female labour-force participation, strong disagreement emerged about the common practice of classifying families according to the position of the male 'head' only (Britten & Heath 1983; Goldthorpe 1983, 1984; Erikson 1984; Heath & Britten 1984; Stanworth 1984; Crompton & Mann 1986). Sharing similar life opportunities or material circumstances, members of the same family have usually been treated as equals. However, within this household approach the

© *Scandinavian Sociological Association, 1995*

characteristics of the male are implicitly assumed to be dominant. Apart from the question what should be the unit of stratification, the family or the individual, one of the still most important issues is the wife's relative contribution to life chances, interests and standards of living that characterize a household as a whole (see also: Sørensen & McLanahan 1987; Van Berkel & De Graaf 1995).

Sørensen concluded that 'the empirical evidence is to some extent in favor of the conventional approach, and its use in empirical research probably has not resulted in serious misrepresentations', but also that 'nonetheless, there seem to be sufficient grounds for recommending a change in the procedure for determining a family's class position in future studies' (Sørensen 1994:45). These grounds are to

be found in studies on subjective class identification and voting behaviour, which show that women's own class positions do influence their attitudes and sometimes even to a larger extent than do their husbands' positions (Abbot 1987; Davis & Robinson 1988; Leiulfstrud & Woodward 1989; De Graaf & Heath 1992; Hayes & Jones 1992; Baxter 1994). In this article, we seek to extend the ongoing discussion by moving to another dimension of social stratification, educational attainment.

Nowadays women seem to be less characterized by the fact that they have lower social positions than men, although even within the higher strata they are still often in a less fortunate position than men (e.g., Lesser Blumberg 1978; Sewell, Hauser & Wolf 1980; Treiman & Hartman 1983; Reid & Stratta 1989). Generally speaking, for the study of gender inequality it is important to compare not only women's individual positions with those of men, but also the positions of wives with those of their husbands. We apply this idea to educational attainment. Unlike occupation, an analysis based on education has the advantage that there is no problem in allocating a position to women. At some point in time both men and women will have achieved a certain level of education that, together with their occupation and income, is a major determinant of their position in the stratification system. Analogous to the debate on class analysis, we raise the central question whether the education of the husband still dominates his wife's behaviour. Since married women's social positions – as also indicated by their achieved level of education – have improved over time, this question becomes more pertinent.

In what follows we narrow this issue to questions about education and *culture participation*, the latter being treated as one of the possible areas in which this type of male dominance might occur. In most Western societies the participation in so-called high-brow culture is a very exclusive form of consumption. Generally, the higher a person's education, the more likely it is that this person visits theatre performances, museums, classical concerts, and so forth. Various research has shown the strong association with educational attainment,

while income or occupation turns out to be less important (e.g., Ganzeboom 1984, 1989; Knulst 1989). Our objective is to examine whether and to what extent the education of the husband is a dominant factor for his wife's cultural behaviour. This is not a question of how to classify married couples along an educational hierarchy, but a question of what happens when persons with different levels of education are part of the same household.

A general idea about why education is so strongly associated with high cultural behaviour is that to appreciate cultural performances one needs a certain level of knowledge. This knowledge is accumulated via formal education, while higher educated people are also more encouraged to engage in the arts. Besides the role of individual preferences, cognitive skills, and capacities, education is seen as an important resource for the attainment or consolidation of social status by way of such activities as cultural participation (Collins 1971). However, following Weber ([1921] 1971), the amount of resources does not only depend on one's own social position, but also on the position of individuals in one's direct social environment.

## 1. Does the husband's education dominate?

Earlier studies have clearly indicated that the education of the spouse is almost as good in predicting one's level of culture participation as one's own education (e.g., De Graaf & Ganzeboom 1990; De Graaf 1991; Ultee & De Graaf 1991). Some readers might interpret this predictive power in terms of partner selection mechanisms in the marriage market (Kalmijn 1991; Mare 1991). Although people are inclined to choose a partner who is similar in some characteristics, this does not clarify the issue under study; a family's cultural behaviour dominated by the male education.<sup>1</sup> De Graaf & Ganzeboom (1990) have shown that the effect of the husband's education on the culture participation of his wife is stronger than vice versa. While analysing the same data, De Graaf (1991) found that the male is no longer dominant if one not only controls for age, but also for income

and the number of children in the household. Given the expansion of women's education, it is conceivable that their husband's level of education has become less or even no longer dominant over time. In turn, for men we can expect an increasing importance of their wives' educational levels.

To explain this type of male dominance we could follow a status interpretation (e.g., Ganzeboom 1982). We may hypothesize that because of relatively lower levels of education married women tend to 'borrow' from their husbands' higher educational positions. Davis & Robinson (1988) examined the same type of 'status maximization' effect on the class identifications of married men and women in the United States. They did so by looking at couples in which the wife had a higher educational, occupational or income position than her husband. No general evidence was found that these husbands attached greater importance to the wife's characteristics. Similar results pertain to various studies of intergenerational mobility, which postulated status maximization as well (e.g., Lipset 1960; De Graaf, Nieuwebeerta & Heath 1995;). In the present study we examine the relative salience of the spouse's education, not only when the wife's position is higher, but also when the husband's position is higher – traditionally, by far the more common situation. As it does more frequently happen that the wife's education is higher than that of the husband,<sup>2</sup> an analysis of mixed couples should include trends.

Opposed to a status interpretation, predicting that the highest education has the strongest effect, we can focus on the potential sacrifices in a situation of 'adjustment' for educationally mixed marriages. What happens when a person with a lower education marries a higher educated person? While the structure of adult friendships shows that especially people with the same level of education tend to associate with each other (Verbrugge 1977), it is doubtful whether these friends and acquaintances will 'accept' an adjustment to a higher level of culture participation. If the same logic applies to the spouse, embedded in a high cultural environment, these effects should level each other out. However, given that

a certain degree of education is also a prerequisite to enjoy highbrow culture, more highly educated persons might tend to adjust themselves more easily (cf. Scitovsky 1976). There is some evidence that instead of status maximization a kind of 'status minimization' characterizes the interactions influencing the patterns of cultural consumption (De Graaf 1991). For the issue under study here, the question then is: Do such effects apply to men and women in the same way? It will be shown below that by using so-called diagonal reference models we have a powerful tool for testing such specific hypotheses about educational heterogeneity.

A serious drawback of previous research is the lack of attention to *how* the spouse's education affects one's cultural behaviour. Especially regarding the visits to cultural activities outside the home one observes a very strong association between the husband's and wife's levels of participation. This reveals not only a tendency to spend available leisure time together, but probably also encouragement and discouragement to exhibit a specific type of behaviour. In this sense, the effect of the spouse's education mainly operates via his or her cultural behaviour. As we move from analysing the individual to analysing both spouses' behaviour simultaneously, 'cross-spouse' educational effects emerge, which primarily are indirect. Hence, we may best start to examine male dominance by comparing the total effects of the husband's and wife's education on their interdependent cultural behaviour. Unlike other studies which seemed to imply such a behavioural mechanism focusing on the individual, we will explicitly incorporate both spouses' culture participation in a model applicable to the household as a whole. Because of comparing the total educational effects, this model may assume that only the own education directly influences the husband's or wife's cultural behaviour.

The outline of our empirical analysis is as follows. First, we apply a simultaneous equation model in which both the husband's and the wife's level of culture participation are included. Second, we apply diagonal reference models to study in a more elaborate way educationally mixed marriages.

Before turning to a further discussion of these models and the results, we will describe the data and the control variables used.

## 2. Data and measures

We analyse a pooled data set from a longitudinal Dutch research project on the use of services. The set consists of national representative household samples. The data were gathered in 1979, 1983 and 1987 (Sociaal en Cultureel Planbureau 1988). From a total of 13,816 households, in which both husband and wife were questioned independently, we selected those between 25 and 75 years of age and we dropped those with a missing value on either of the variables. This resulted in 9,365 households.<sup>3</sup> To study trends over time we constructed three birth cohorts on the basis of the wife's year of birth. These are the households in which the wife was born before 1935 ( $N = 3,100$ ), between 1935 and 1949 ( $N = 3,540$ ), and after 1949 ( $N = 2,725$ ). Because the data set covers surveys at different points in time we can control for certain age effects within each cohort.<sup>4</sup> To do so, we simply take the wife's age, which is coded in years (25 through 74).

The husband's and wife's cultural behaviour is measured by means of a seven-point scale. The scale refers to the level of participation in six cultural activities over the last 12 months. The activities include: visiting theatres for plays, theatres for cabaret, concerts of classical music or opera, museums, galleries of arts, and cinemas. Reading behaviour, which is usually included in scales like this, has been left out, since the data only covered the number of books available in the household.<sup>5</sup>

The husband's and wife's education is measured by a combination of two educational classifications: highest achieved level of general education and highest achieved level of vocational training. They are coded as: (1) primary, (2) lower vocational, (3) intermediate secondary, (4) intermediate vocational and higher general, (5) higher vocational, and (6) university.<sup>6</sup> With respect to educational heterogeneity there is a clear difference between the oldest cohort in which 52 per cent of the mar-

riages are mixed and the two younger cohorts in which 63 and 62 per cent of the marriages are mixed. The percentage of couples in which the wife has a higher education than her husband increases from 10 per cent in the oldest cohort to 18 per cent in the second cohort, and to 33 per cent in the youngest cohort (see also the Appendix: Table A1).

The following household characteristics are included as control variables: household income, level of urbanization, the presence of children in the household, and wife's age. Household income can be expected to have a positive effect on the husband's and wife's level of culture participation. The amount of available household income, on a yearly basis, is coded in five categories (lowest through highest).<sup>7</sup> Couples living in larger cities can be expected to benefit from the fact that there are more cultural facilities in their immediate environment. Households in municipalities with more than 50,000 inhabitants are coded as (1), and the remaining ones as (0). While the former characteristics most likely have a positive effect on spouses' cultural consumption, the presence of children in the household is expected to have a negative effect. Actually, we expect that the presence of very young children has the strongest negative effect on spouses' cultural behaviour. A first dummy variable refers to the presence of one or more children below the age of five, while a second indicates the presence or absence of children aged 5 through 11. Moreover, since the care of children is a task predominantly carried out by women, we also expect the wife's level of culture participation to be affected more by the presence of children than the husband's level of culture participation.<sup>8</sup>

## 3. Spouses' interdependent cultural behaviour

To answer the question whether and to what extent male dominance occurs, we first compare the total effects of the husband's and wife's education on their interdependent cultural behaviour. As stated in our theoretical outline, a model is needed that incorporates both spouses' levels of culture participation. For this pur-

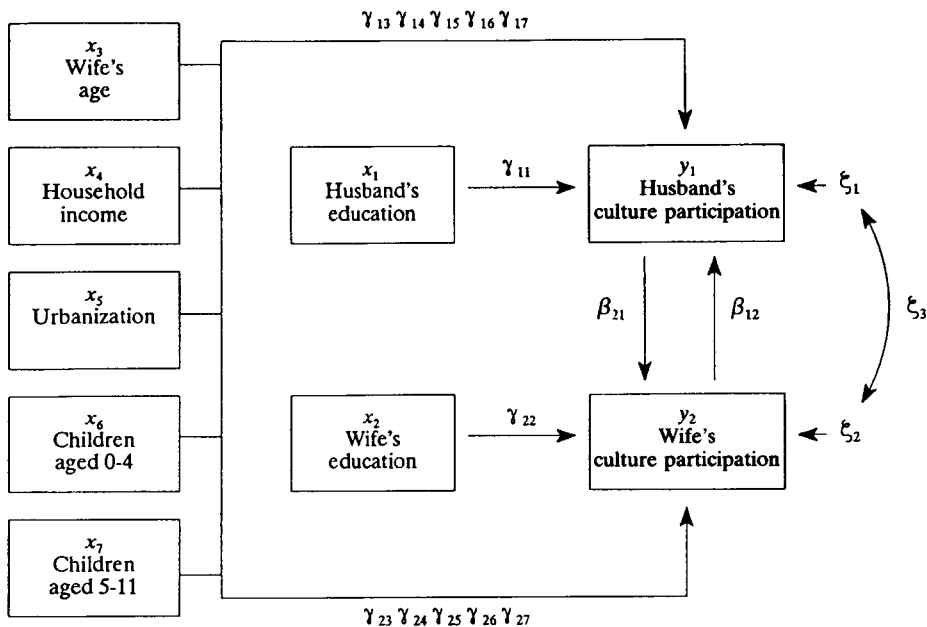


Fig. 1. Simultaneous equation model for spouses' levels of culture participation.

pose we apply a simultaneous equation model. A graphical representation of this model can be found in Figure 1.<sup>9</sup>

### 3.1. Testing structural equalities

To start with, we used a so-called multi-group approach to detect differences and similarities across the three birth cohorts. A multigroup approach facilitates the analysis of data from several samples or groups, testing models for each group with some or all parameters constrained to be equal across the groups (Jöreskog & Sörbom 1989:255). Separate covariance matrices for each cohort were constructed and analysed (see the Appendix: Table A2). The results, listed in Table 1, show that there are some structural equalities *within* and *across* cohorts, allowing for a more parsimonious representation of the data.<sup>10</sup>

As far as the control variables are concerned, we can be brief. The effects of household income do not differ substantially between husband and wife. For urbanization this appears only so in the

oldest cohort. The effects of the presence of children are expected to be different for husband and wife. It seems that this is only the case for very young children. Moreover, a significant difference can only be found in the youngest cohort. Across-cohorts differences are not very apparent for the effects of household income. The same holds for the effect of urbanization on the husband's level of culture participation. For the presence of children in the older age group there are also no large differences across cohorts.

Turning to the relations that have our theoretical interest, we tested whether the effects of education mediated by spouses' cultural behaviour substantially differ between husband and wife. The results of constraining this part of the model are presented in the lower half of Table 1. The  $\chi^2$  difference test indicates that there is no overall equality: with no difference within each cohort the model gains six degrees of freedom but suffers from a loss in  $\chi^2$  of 28.84. However, another test showed that there is equality in the youngest cohort.

Table 1. Multigroup analysis of the effects on spouses' levels of culture participation. Testing structural equalities within and across cohorts.

	Equality constraints	df	$\chi^2$	Difference
Baseline model		4	2.98	
<i>Control variables</i>				
Within cohorts:				
- Household income	$\gamma_{113} = \gamma_{123}; \gamma_{213} = \gamma_{223}; \gamma_{313} = \gamma_{323}$	7	3.22	0.24
- Urbanization	$\gamma_{115} = \gamma_{125}; \gamma_{215} = \gamma_{225}; \gamma_{315} = \gamma_{325}$	10	25.09	21.87**
	$\gamma_{115} = \gamma_{125}$	8	4.24	1.02
	$\gamma_{115} = \gamma_{125}; \gamma_{215} = \gamma_{225}$	9	16.50	12.26**
	$\gamma_{115} = \gamma_{125}; \gamma_{315} = \gamma_{325}$	9	12.83	8.59
- Children aged 0-4	$\gamma_{216} = \gamma_{226}; \gamma_{316} = \gamma_{326}$	10	17.21	12.97**
	$\gamma_{216} = \gamma_{226}$	9	7.57	3.33
- Children aged 5-11	$\gamma_{217} = \gamma_{227}; \gamma_{317} = \gamma_{327}$	11	10.74	3.17
Across cohorts:				
- Household income	$\gamma_{113} = \gamma_{213} = \gamma_{313} = \gamma_{123} = \gamma_{223} = \gamma_{323}$	13	11.78	1.04
- Urbanization	$\gamma_{215} = \gamma_{315}$	14	11.95	0.17
	$\gamma_{225} = \gamma_{325}$	15	17.49	6.54*
	$\gamma_{217} = \gamma_{317} = \gamma_{227} = \gamma_{327}$	15	14.44	3.49
<i>Education and culture participation</i>				
Within cohorts:				
- Equal effects	$\gamma_{111} = \gamma_{121}; \gamma_{211} = \gamma_{221}; \gamma_{311} = \gamma_{321};$ $\beta_{112} = \beta_{212}; \beta_{112} = \beta_{212}; \beta_{312} = \beta_{321}$	21	33.28	28.84**
	$\gamma_{111} = \gamma_{121}; \beta_{112} = \beta_{212}$	17	25.50	10.86*
	$\gamma_{111} = \gamma_{221}; \beta_{312} = \beta_{221}$	17	21.66	7.22*
	$\gamma_{311} = \gamma_{321}; \beta_{312} = \beta_{321}$	17	15.19	0.75
Across cohorts:				
- Equal effects for husband	$\gamma_{111} = \gamma_{211} = \gamma_{311} = \gamma_{221};$ $\beta_{211} = \beta_{321} = \beta_{321} = \beta_{312}$	21	33.29	18.10**
- Equal effects for wife	$\gamma_{122} = \gamma_{222} = \gamma_{322} = \gamma_{311};$ $\beta_{112} = \beta_{212} = \beta_{312} = \beta_{321}$	21	26.74	11.55*

Note: Equality constraints are denoted by their parameters, the first digit referring to the cohorts ( $\gamma_{113} = \gamma_{123}$  means that  $\gamma_{13}$  and  $\gamma_{23}$  are constrained to be equal in the first cohort;  $\gamma_{113} = \gamma_{213} = \gamma_{313} = \gamma_{123} = \gamma_{223} = \gamma_{323}$  means that  $\gamma_{13}$  and  $\gamma_{23}$  are constrained to be equal across all cohorts). Source: Additional Investigation into Use of Social and Cultural Facilities, AVO 1979/1983/1987.

\* significant  $p < 0.05$  \*\* significant  $p < 0.01$ .



Given these findings, we tested whether the effects of the husband's education and culture participation on his wife's behaviour do not vary *across* cohorts. We find no support for such a pattern. The same type of constraint is also tested for the wife's influence on her husband's cultural behaviour. Although the loss in  $\chi^2$  is less, it is still large enough to be significant at the 5 per cent level. Hence, the effects on both husband and wife appear to vary across cohorts. The  $\chi^2$  statistic of the resulting model amounts to 15.19 with 17 degrees of freedom.<sup>11</sup> The corresponding parameter estimates show a strong interdependency between spouses' cultural behaviour, with a rather large difference in favour of the husband for the oldest cohort, declining to a situation of balance for the youngest cohort (for these estimates see the Appendix: Table A3).

### 3.2. Comparing total effects

To what extent does the education of the husband dominate his wife's cultural behaviour? The total effects of the husband's and wife's education, resulting from the model above, are listed in Table 2. In the *oldest* cohort the husband's education seems to be dominant. For the wife's cultural behaviour we observe that the husband's education has an effect of 0.243, while her own education has an effect of 0.207. For the husband his own education is about twice as important as his wife's education (0.292 versus 0.142). For the husband's culture participation in the *second* cohort the own education is still more important (0.258 versus 0.186), for the wife the total effect of her spouse's education is now about the same as the effect of the own education (0.224 versus 0.249). In the *youngest* cohort there is no difference left between the husband and wife, one's own education being more important than the education of the spouse (a total effect of 0.245 versus a total effect of 0.190). To summarize: we find some evidence of declining male dominance across cohorts. The husband's education has a decreasing influence on the wife's cultural behaviour, while for the husband his wife's education has become more important.

Some other findings refer to household characteristics included in our analysis as control variables. The total effects on spouses' levels of culture participation are also listed in Table 2. Households with one or more children under age five participate much less in high cultural activities. In the second cohort the total effects are about  $-0.20$ . In the youngest cohort, consisting of many couples who experience parenthood for the first time, the effects are even stronger, and also different for husband and wife as expected. The presence of older children has no effect or only a small effect. Household income has clear though minor positive effects on spouses' levels of culture participation. In the second and third cohort the total effects of living in a larger municipality vary, but are positive as expected. We find no significant effects of urbanization in the oldest cohort. Furthermore, the estimates for the wife's age indicate that there are almost no strong age effects within the three cohorts.

The results of applying this simultaneous equation model to spouses' interdependent cultural behaviour show that male dominance only occurs in the oldest cohort. For later cohorts the total effect of the husband's education is either about the same or less than the total effect of the wife's own education. In the next section we examine educationally mixed couples more elaborately.

## 4. Culture participation and mixed marriages

To capture specific interaction effects underlying spouses' cultural behaviour we apply diagonal reference models as introduced by Sobel (1981).<sup>12</sup> Diagonal reference models offer us an appropriate design for studying to what extent educationally heterogamous individuals tend to exhibit a cultural behaviour typical of their own educational level, and of the educational level of their spouses. De Graaf & Heath (1992) have shown the merit of these models for testing specific hypotheses about class heterogeneity within households. For a more detailed argument we refer to their contribution in *Acta Sociologica*, and also to Sørensen (1994:41–42).



Table 2. Total effects of spouses' education and household characteristics for the constrained model ( $\chi^2$  15.19 df 17 from Table 1). Standard errors in parentheses.

	Cohort	Husband's culture participation	Wife's culture participation
Husband's education	1	0.292** (0.021)	0.243** (0.19)
	2	0.258** (0.027)	0.224** (0.024)
	3	0.245** (0.027)	0.190** (0.021)
Wife's education	1	0.142** (0.019)	0.207** (0.021)
	2	0.186** (0.027)	0.249** (0.026)
	3	0.190** (0.024)	0.245** (0.022)
Control variables:			
- Wife's age	1	-0.017 (0.021)	-0.046* (0.021)
	2	-0.046 (0.026)	-0.007 (0.026)
	3	-0.121** (0.023)	-0.009 (0.023)
- Household income	1	0.085** (0.014)	0.093** (0.014)
	2	0.107** (0.020)	0.115** (0.020)
	3	0.096** (0.016)	0.096** (0.015)
- Urbanization	1	0.003 (0.027)	0.003 (0.029)
	2	0.118** (0.035)	0.028 (0.038)
	3	0.182** (0.037)	0.110** (0.038)
- Children aged 0-4	2	-0.193** (0.039)	-0.206** (0.039)
	3	-0.271** (0.057)	-0.346** (0.051)
- Children aged 5-11	2	-0.029 (0.027)	-0.031 (0.026)
	3	-0.026** (0.005)	-0.026** (0.004)

Note: Cohort 1: wife born before 1935 (N = 3,100), Cohort 2: wife born between 1935 and 1949 (N = 3,540), Cohort 3: wife born after 1949 (N = 2,725).

Source: Additional Investigation into Use of Social and Cultural Facilities, AVO 1979/1983/1987.

\* significant  $p < 0.05$  \*\* significant  $p < 0.01$ .

Applying these models to educational heterogeneity, the levels of culture participation of spouses with similar educational levels are used as a starting-point. Each of these 'diagonal cells' represents the level of culture participation of a typical educational category, not biased by the level of participation of other categories. Furthermore, in these categories persons can logically not be influenced by the education of the spouse since they have the same education. Of course, this does not mean that these spouses do not influence each other, but that is not the issue here.

Given that there is no reason to assume a different relation between our control variables and the level of culture participation for each diagonal cell, the base-line diagonal reference model with  $l$

covariates can be written as follows (Sobel 1985; Sorensen 1989):

$$y_{ijk} = p^* \alpha_i + (1-p)^* \alpha_j + \sum \beta_l^* X_{ijkl} + E_{ijk}$$

Two reference values have to be examined for the cultural behaviour of 'off-diagonal' women: (1) the expected value for their own educational level,  $\alpha_i$ , weighted by  $p$ , and (2) the expected value for the educational level of their husbands,  $\alpha_j$ , weighted by  $(1-p)$ .<sup>13</sup> By applying the same formula to the cultural behaviour of men, we can compare women who have a lower or higher education than their husbands with men who have a lower or higher education than their wives. This means that we analyse women and men separately with identical models. The estimated relative weights are being controlled for a set of  $l$  covariates with  $\beta_l$  effect parameters. As

before we include household income, level of urbanization, presence of children, and the wife's age. Some extra parameters are added to the controls. These parameters allow for cohort specific covariation of the wife's age, level of urbanization, and the presence of children under age five. The models also control for overall differences in the level of culture participation across the three birth cohorts.

#### 4.1. Model testing

With six parameters for the diagonal, one weight parameter  $p$ , and 13 parameters for the covariates, the baseline model uses 20 degrees of freedom. The general fit statistics for both women and men are presented in Table 3. To test the hypothesis that the highest education will be more salient, following the idea of status maximization, we have to distinguish the upper and lower off-diagonal cells in a table of the husband's and wife's education. Our second diagonal reference model incorporates such a distinction in a parsimonious way. It also uses only 20 degrees of freedom. The relative weight of one's education is modelled as  $p$  or  $(1-p)$  depending on which spouse has the highest education. We just take the baseline model in case the own education is the higher one, while inverting the weights  $p$  and  $(1-p)$  in case the spouse's education is the higher one (see Model B in Table 3). For men we find no indication that this second model is more appropriate. However, we do find a lower residual mean square for women.

Next, we turn to a less restrictive, asymmetrical model. It uses one degree of freedom extra via the weight parameters  $r$  and  $(1-r)$  instead of the inverse  $(1-p)$  and  $p$  (Model C in Table 3). This version of differentiating salience also yields a lower residual mean square for the level of culture participation of men. However, the likelihood ratio test<sup>14</sup> points out that the improvement of the fit is statistically not significant at the 5 per cent level. Hence, the baseline model is still to be preferred. For women we find no significant improvement compared to the second model. Before drawing any conclusion we have to consider trends over time. The previous models did not take the relatively improved

position of married women into account. For both men and women it can be expected that the salience of the wife's education has increased, while the salience of the husband's education has remained the same or decreased. Interestingly, such a process of 'feminization' (De Graaf & Heath 1992:314) could also be driven by status maximization effects. The larger the proportion of women with a higher educational level than their husbands, the more often it is that the female position counts most.

To test for trends across cohorts we added a linear trend parameter to the original first three diagonal reference models (Models A, B and C changing into D, E and F). With these specifications the relative weight coefficients vary with  $\delta$  across cohorts. For women we find some improvement for both the symmetrical  $p$  and the asymmetrical  $p$  and  $r$  model (Models E and F). In both cases they are not statistically significant at the 5 per cent level, saying that our expectation of a trend falls short. However, for men we do find a substantially lower residual in case of the asymmetrical  $p$  and  $r$  model (Model F). The  $\chi^2$  difference amounts to 7.60 with two degrees of freedom which is significant at the 5 per cent level. The last three models listed in Table 3 include a nonlinear trend. Instead of one parameter  $\delta$  there are two parameters to account for possible differences across cohorts (Models G, H and I). None of them, either for women or men, results in a better representation of the data.<sup>15</sup>

#### 4.2. Comparing the relative weights

The parameter estimates of the baseline and best-fitting models (Model B for women, Model F for men) can be seen in Table 4. For women the relative salience of their own education and that of their husband depends on which of the spouses has the higher position. The estimate of 0.393 for  $p$  surprisingly contradicts the idea of status maximization. Women having a higher education than their husband seem to have a cultural behaviour that is more common for their husbands' lower educational group (weighted by 0.607) than for their own (weighted by 0.393). In turn, for couples where their husbands have a higher education the women seem to take their

Table 3. Diagonal reference models for the relative salience of one's own education and the education of the spouse. Residual mean squares and  $\chi^2$  differences.

	df	Women RMS	$\chi^2$	Men RMS	$\chi^2$
A $p$ WED + (1- $p$ ) HED	9346	1.76726		1.65176	
B WED>HED: $p$ WED + (1- $p$ ) HED WED<HED: (1- $p$ ) WED + $p$ HED	9346	1.76573		1.65233	
C WED>HED: $p$ WED + (1- $p$ ) HED WED<HED: $r$ WED + (1- $r$ ) HED	9345	1.76571	C vs. B: 0.11	1.65117	C vs. A: 3.35
D ( $p$ - $\delta$ COH) WED + ((1- $p$ )+ $\delta$ COH) HED	9345	1.76700		1.65131	
E WED>HED: ( $p$ - $\delta$ COH) WED + ((1- $p$ )+ $\delta$ COH) HED WED<HED: ((1- $p$ )- $\delta$ COH) WED + ( $p$ + $\delta$ COH) HED	9345	1.76530	E vs. B: 2.17	1.65203	
F WED>HED: ( $p$ - $\delta$ COH) WED + ((1- $p$ )+ $\delta$ COH) HED WED<HED: ( $r$ - $\delta$ COH) WED + ((1- $r$ )+ $\delta$ COH) HED	9344	1.76502	F vs. B: 3.66	1.65042	F vs. A: 7.60*
G ( $p$ - $\delta_1$ COH2- $\delta_2$ COH3) WED + ((1- $p$ )+ $\delta_1$ COH2+ $\delta_2$ COH3) HED	9344	1.76704		1.65095	
H WED>HED: ( $p$ - $\delta_1$ COH2- $\delta_2$ COH3) WED + ((1- $p$ )+ $\delta_1$ COH2+ $\delta_2$ COH3) HED WED<HED: ((1- $p$ )- $\delta_1$ COH2- $\delta_2$ COH3) WED + ( $p$ + $\delta_1$ COH2+ $\delta_2$ COH3) HED	9344	1.76522		1.65259	
I WED>HED: ( $p$ - $\delta_1$ COH2- $\delta_2$ COH3) WED + ((1- $p$ )+ $\delta_1$ COH2+ $\delta_2$ COH3) HED WED<HED: ( $r$ - $\delta_1$ COH2- $\delta_2$ COH3) WED + ((1- $r$ )+ $\delta_1$ COH2+ $\delta_2$ COH3) HED	9343	1.76513		1.65016	I vs. F: 1.48

Note: Models shown refer to women. All of them fit six parameters ( $\alpha_1$ - $\alpha_6$ ) for the diagonal reference intercepts and 12  $\beta$ -coefficients for the control variables, defined as:  $\beta_1$  AGE +  $\beta_2$  AGE<sub>COH2</sub> +  $\beta_3$  AGE<sub>COH3</sub> +  $\beta_4$  INC +  $\beta_5$  URB +  $\beta_6$  URBCOH2 +  $\beta_7$  URBCOH3 +  $\beta_8$  CH1COH2 +  $\beta_9$  CH1COH3 +  $\beta_{10}$  CH2 +  $\beta_{11}$  COH2 +  $\beta_{12}$  COH3 (N = 9365). HED: husband's education, WED wife's education, COH: birth cohorts wife (1 = before 1935, 2 = 1935-1949, 3 = after 1949), AGE: wife's age, AGE<sub>COH2</sub>: wife's age cohort 2, AGE<sub>COH3</sub>: wife's age cohort 3, INC: household income, URB: urbanization, URBCOH2: urbanization cohort 2, URBCOH3: urbanization cohort 3, CH1COH2: children aged 0-4 cohort 2, CH1COH3: children aged 0-4 cohort 3, CH2: children aged 5-11, COH2: cohort 2, COH3: cohort 3.

Source: Additional Investigation into Use of Social and Cultural Facilities, AVO 1979/1983/1987.

\* significant  $p < 0.05$ .

own educational level more into account. Hence, we find no indication that under such circumstances the characteristic of the spouse plays a dominant role.

The findings for men, according to Model F, are far more complex. Here we have to look at  $p$  in case their own education is higher and at  $r$  in case their wife's education

is higher, while both estimates are to be adjusted by the linear trend parameter  $\delta$ . In the oldest cohort it seems that the cultural behaviour of men, either with a higher or lower education than their spouses, mainly reflects their own educational category, the weights being 0.623 ( $p$ ) and 0.786 ( $r$ ). This also contradicts a status maximization

Table 4. Parameters of diagonal reference models presented in Table 3. Standard errors in parentheses.

	Women		Men	
	Baseline	Model B	Baseline	Model F
$\alpha_{11}$	0.753** (0.211)	0.791** (0.210)	0.469* (0.204)	0.488* (0.203)
$\alpha_{22}$	1.241** (0.209)	1.280** (0.209)	0.894** (0.202)	0.906** (0.203)
$\alpha_{33}$	1.734** (0.214)	1.782** (0.214)	1.360** (0.207)	1.379** (0.207)
$\alpha_{44}$	2.655** (0.229)	2.763** (0.230)	2.052** (0.221)	2.102** (0.222)
$\alpha_{55}$	2.902** (0.223)	2.967** (0.224)	2.389** (0.215)	2.440** (0.216)
$\alpha_{66}$	3.368** (0.237)	3.393** (0.240)	2.975** (0.226)	2.999** (0.229)
$p$	0.560** (0.020)	0.393** (0.025)	0.544** (0.022)	0.623** (0.061)
(1- $p$ )	0.440** (0.020)	0.607** (0.025)	0.456** (0.022)	0.377** (0.061)
$r$				0.786** (0.081)
(1- $r$ )				0.214** (0.081)
$\delta$				0.063* (0.027)
$\beta_1$ AGE	-0.083* (0.034)	-0.087* (0.034)	-0.043 (0.032)	-0.045 (0.032)
$\beta_2$ AGE <sub>COH2</sub>	0.080 (0.057)	0.082 (0.056)	-0.007 (0.055)	-0.005 (0.055)
$\beta_3$ AGE <sub>COH3</sub>	0.108 (0.086)	0.108 (0.086)	-0.097 (0.084)	-0.088 (0.084)
$\beta_4$ INC	0.137** (0.015)	0.138** (0.015)	0.125** (0.014)	0.124** (0.014)
$\beta_5$ URB	0.013 (0.049)	0.014 (0.049)	0.051 (0.048)	0.050 (0.048)
$\beta_6$ URB <sub>COH2</sub>	0.023 (0.069)	0.022 (0.069)	0.103 (0.067)	0.104 (0.067)
$\beta_7$ URB <sub>COH3</sub>	0.151* (0.074)	0.141 (0.074)	0.227** (0.071)	0.227** (0.071)
$\beta_8$ CH1 <sub>COH2</sub>	-0.394** (0.071)	-0.394** (0.071)	-0.252** (0.068)	-0.252** (0.068)
$\beta_9$ CH1 <sub>COH3</sub>	-0.498** (0.052)	-0.499** (0.052)	-0.399** (0.050)	-0.394** (0.050)
$\beta_{10}$ CH2	-0.047 (0.036)	-0.048 (0.036)	-0.072* (0.035)	-0.071 (0.035)
$\beta_{11}$ COH2	-0.360 (0.273)	-0.369 (0.273)	-0.009 (0.264)	0.001 (0.264)
$\beta_{12}$ COH3	-0.537 (0.312)	-0.533 (0.312)	0.171 (0.302)	0.167 (0.302)

Note: See Table 3 for abbreviations used.

Source: Additional Investigation into Use of Social and Cultural Facilities, AVO 1979/1983/1987.

\* significant  $p < 0.05$ , \*\* significant  $p < 0.01$ .

effect. The latter coefficient is much larger. Furthermore, across cohorts the weights most of all imply an increased salience of the education of their wives. Higher educated men weigh their wives' lower education by 0.38 in the oldest cohort, 0.44 in the second cohort, and 0.50 in the youngest cohort.<sup>16</sup> A similar pattern applies to couples in which the wife's education is the higher one, the weights increasing from 0.21 in the oldest cohort to 0.28 in the second and 0.34 in the youngest cohort.

The estimates of the covariates, shown in the lower half of Table 4, are quite compatible with the results of the simultaneous equation model. There are substantial negative effects of having children under age five. Other household characteristics are less associated with spouses' levels of culture participation. The parameter esti-

mates controlling for overall differences in the level of culture participation across cohorts are all non-significant.

In Figure 2 we have summarized the findings of using diagonal reference models. Generally speaking, there seems to be no evidence that lower educated women are more likely to 'borrow' from their husbands' higher educational positions. Neither do relatively lower positioned men take their wife's education more into account. The salience of the education of the spouse appears to be dependent on the relative position, for women and men alike, but to reflect 'status minimization' rather than status maximization. As shown in Figure 2 such effects do not apply to men and women in entirely the same way. Men who are more highly educated than their wives tend to give in less than women who

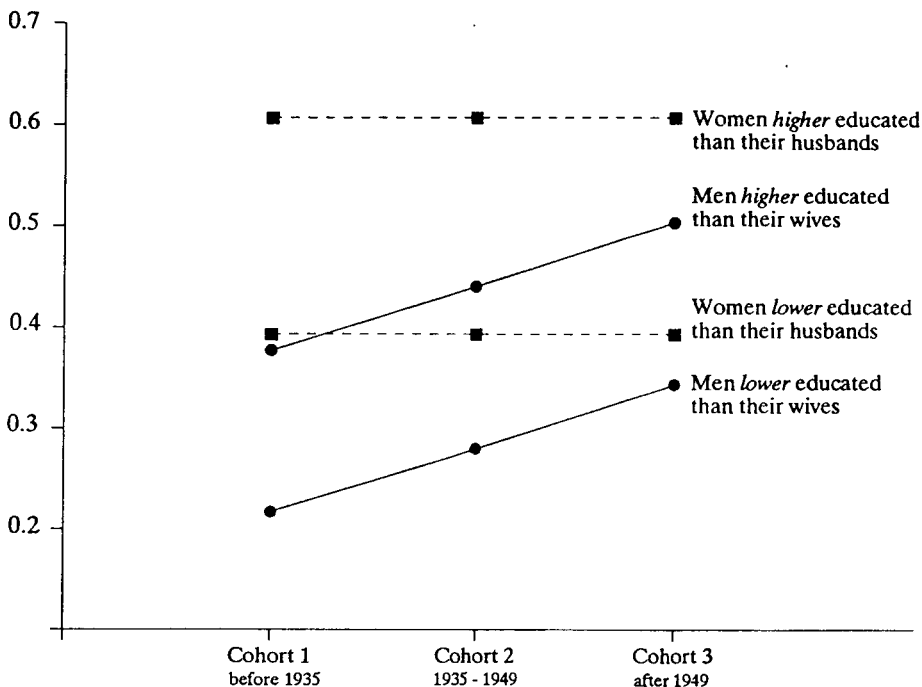


Fig. 2. Relative salience of the spouse's education for the cultural behaviour of married men and women.

are more highly educated than their husbands, although across cohorts the wife's education does become more important.

## 5. Conclusions and discussion

In this article we have tried to broaden the ongoing discussion on women and class analysis to another major stratification indicator, educational attainment. Such an extension originates from a more general question relating to gender inequality, that is: to what extent do the husband's characteristics still dominate his wife's behaviour in different areas of life? With education as the characteristic under study we have presented an analysis of the participation in so-called highbrow culture, treated as one area in which this type of male dominance might operate. This kind of behaviour, which many relate to 'high status', is barely covered in the literature on gender inequality.

While it has become very common to examine husband's and wife's relative positions in the class structure it is also relevant to focus on their education, especially if it is education rather than occupation that makes the difference. In effect, the cultural activities outside the home seem to be predominantly a domain of the highly educated public. Generally, the higher a person's level of education, the more likely it is that this person will visit theatres, museums and concert halls. For married persons also the education of the spouse is likely to influence one's cultural behaviour.

To what extent, then, is the education of the husband a dominant factor for the wife's cultural behaviour? To answer this question we analysed a model in which the interdependency between spouses' levels of culture participation is explicitly incorporated. Previous studies tended to disregard this interdependency, at least at the measurement level. In short, the data on three birth

cohorts from Dutch household surveys show some evidence of declining male dominance. Most of all, only for households in which the wife was born before 1935 does the education of her husband have a stronger total effect than her own education. For later cohorts the husband's education has about the same effect or even less effect than her own education. Interestingly, the results also suggest that the total effect of the wife's education on her husband's cultural behaviour has increased over time.

In the second part of this study it has been shown that the relative educational positions make for a differential salience of the education of the spouse. Using diagonal reference models, we have compared women who have a higher or lower education than their husbands with men who have a higher or lower education than their wives. Following a status interpretation, the less educated spouse is likely to maximize his or her status by adapting to the cultural behaviour typical of the partner's higher educational category. This status maximization hypothesis implies that male dominance occurs because women have a lower education than their husbands. Our results clearly show the opposite. In general, persons who are lower educated than their spouses do not tend to have a level of cultural participation that is more characteristic of their spouses' higher education. In contrast, persons who are relatively higher educated seem to take their spouses' lower education more strongly into account. We may reason that the costs of a lower level of participation for the higher educated partner are less than vice versa. Moreover, part of the male dominance in the oldest cohort seems to be a consequence of the fact that men give in less than women, irrespective of their relative educational positions. However, there appears to be a trend in the cultural behaviour of men. The salience of the wife's education is increasing across cohorts. In the youngest cohort there is far more symmetry between the cultural behaviour of both sexes. Such an interpretation resembles recent 'gender perspective' research on the division of household labour and married women's economic dependency (e.g. Thompson &

Walker 1991; Brines 1994; South & Spitze 1994). These studies show the importance of paying more attention to explanations which are based on the 'gendered' asymmetrical nature of all kinds of everyday interaction.

Using the phrases of Davis & Robinson (1988), we may altogether conclude that men have moved from relative 'independence' towards 'sharing', while women seem to have shifted from 'borrowing' towards 'sharing'. Compared to the studies on cross-class couples our findings suggest that also in terms of education women's own position does matter. The conventional view, which assumes male dominance, does not hold. Not only women but to an increasing extent also men are likely to be influenced by their spouses' positions.

Of course, the way we examined male dominance does not cover all possibilities of dominance. On the marriage market people choose each other for a variety of reasons. One selection criterion might be the cultural preferences. It is conceivable that the preferences of the male influence the cultural behaviour of his spouse more strongly than vice versa. We note that such criticism also applies to other studies that have resulted from the debate on women and class analysis. If partners select each other also on political grounds, the estimation of the impact of class position on political behaviour is not telling the whole story either. Nonetheless, it is still of interest to study the extent to which the husband's and wife's educational attainment is related to the behaviour of both. By focusing attention on spouses' relative educational positions and the consequences for their levels of culture participation, we hope to have shown that the discussion on gender inequality can be enriched.

#### **Acknowledgements**

The research reported here is part of a broader research project, entitled 'Feminizing the Unimportant? Trends of Declining Male Dominance', which is financed by The Netherlands Organization for Scientific Research (grant no. 510-79-403). This study was also supported by the Royal Netherlands' Academy of Arts and Sciences. A first version of this article was presented at the meeting of Research Committee 28 on Social Stratification of the ISA in Trondheim (Norway),



20–22 May 1993. We thank the members of RC28 for their comments, Jan Lammers for his help with later analyses, Wout Ultee and Hester Moerbeek for their suggestions on improving the text, and two *AS* reviewers for their helpful comments.

First version received May 1994  
Final version accepted March 1995

## Notes

<sup>1</sup> Of course, people tend to select a partner on the basis of many criteria. One of them is probably also the cultural preferences. However, given that people select partners on many criteria implies that it is almost impossible to select a partner who is exactly the same with respect to each aspect of life. Therefore, it is likely that partners in general differ to some extent with respect to their cultural preferences. We have, however, to assume that prior selection based on cultural preferences does not affect the estimation of the impact of education on cultural behaviour.

<sup>2</sup> For The Netherlands, it has been shown that whereas in 1959 only in one out of twenty marriages the wife had a higher education than the husband, in 1985 this figure was one out of five (Sixma & Ultee 1984; Dessens, Jansen & Ultee 1990).

<sup>3</sup> Response rates were 69 per cent (1979), 66 per cent (1983), and 72 per cent (1987). There are two reasons for restricting the data set to the 25–75 year age group. The first is to take an age where most people have finished education. Second, it can be assumed that many people older than 75 will not be able to enjoy high levels of culture participation due to physical conditions (cf. De Graaf 1991). About 11 per cent did not fall within the age interval between 25 and 75. In 21 per cent of the cases the husband, the wife, or both had missing values on one or more of the variables. The data include cohabiting heterosexual couples comprising a small minority of about 8 per cent.

<sup>4</sup> We would have preferred to construct cohorts on basis of spouses' year of marriage. However, these data were not available. The results do not differ significantly if we choose cohorts on basis of the husband's year of birth.

<sup>5</sup> Average values of the Kuder-Richardson coefficient are 0.70 for husband's culture participation and 0.71 for wife's culture participation. Table A1 in the Appendix provides some additional information about these scales. The cross-classification tables for each cohort show a strong association between spouses' levels of

participation in these cultural activities. As noted the scales do not include the reading behaviour of spouses. The number of books in the household is only weakly related to the activities outside the home, which is not uncommon in Dutch research on culture participation (cf. Ganzeboom 1989).

<sup>6</sup> Unlike, for example, in Britain and the USA, years of education in The Netherlands is not a good indicator for the level of education. The categories used are pretty standard in Dutch educational research. To avoid problems for readers not familiar with the Dutch educational system general terms are used here.

<sup>7</sup> A consequence of including income is a relatively high proportion of missing data. In case people did not answer the question about their income after taxes, the interviewer asked about income before taxes. Both types of income were made comparable and are combined into a single household income variable. The five categories, standardized on 1987, are: (1) less than 19,500, (2) 19,500–27,500, (3) 27,500–37,500, (4) 37,500–56,000, and (5) 56,000 or more (Dutch guilders, after taxes).

<sup>8</sup> Work-related variables did not have any significant impact after controlling for the other variables. The important time-restriction is the presence of young children.

<sup>9</sup> For this model the equations to be estimated simultaneously are: (1)  $y_1 = \beta_{12}y_2 + \gamma_{11}x_1 + \gamma_{13}x_3 + \gamma_{14}x_4 + \gamma_{15}x_5 + \gamma_{16}x_6 + \gamma_{17}x_7 + \zeta_1$ ; (2)  $y_2 = \beta_{21}y_1 + \gamma_{22}x_2 + \gamma_{23}x_3 + \gamma_{24}x_4 + \gamma_{25}x_5 + \gamma_{26}x_6 + \gamma_{27}x_7 + \zeta_2$  in which  $y_1$ : husband's culture participation,  $y_2$ : wife's culture participation,  $x_1$ : husband's education,  $x_2$ : wife's education,  $x_3$ : wife's age,  $x_4$ : household income,  $x_5$ : urbanization,  $x_6$ : children aged 0–4, and  $x_7$ : children aged 5–11. Technically speaking, in such a non-recursive system, established with a reciprocal relation between two dependent variables, its corresponding equations are only identified with additional (a priori) restrictions. These are mostly exclusion and equality restrictions on the B and  $\Gamma$  matrix (e.g., Fisher 1966; Hanushek & Jackson 1977; Kmenta 1986).

<sup>10</sup> The baseline model includes 47 unconstrained parameters to account for the observed covariances in the cohorts. Leaving aside a few exceptions, households in which the wife was born before 1935 no longer have children younger than 12 years. Therefore, the corresponding parameters for the presence of children are set fixed in the oldest cohort. So, while for each of the two younger cohorts there are 17 free parameters, the number of free parameters for the oldest cohort is 13.

<sup>11</sup> The percentages of variance accounted for vary across cohorts, between 56 per cent and 65 per cent. Included are residual effects on spouses' levels of culture participation, which are incor-



related with the  $x$ -variables. Within each cohort their size is almost equal for husband and wife. Across cohorts the coefficients ( $\zeta_1$  and  $\zeta_2$ ) vary between 0.28 and 0.39. There are modest negative correlations between these two disturbance terms ( $\zeta_3$ ). Because such residual effects have nothing to do with specified relations between explanatory and dependent variables, they refer to specific characteristics not related to spouses' common cultural behaviour.

<sup>12</sup> For a technical discussion of these models compared with mainstream square additive models, see Hendrickx et al. (1993). Instead of Sobel's term 'diagonal mobility models' we use the term 'diagonal reference models' to avoid confusion with Goodman's loglinear diagonal mobility models.

<sup>13</sup>  $y_{ijk}$  is the level of culture participation for  $k$  individuals in cell  $ij$ . Subscript  $i$  refers to the own educational category and  $j$  refers to the educational category of the spouse. The parameters  $\alpha_i$  and  $\alpha_j$  are population averages in cell  $ii$  and cell  $jj$  under the condition that the covariates take the theoretical value of zero. These expressions can be seen as intercepts for the diagonal reference categories.  $E_{ijk}$  is a stochastic error term with 0 as expected value. Leaving aside the co-variables,  $\alpha_i$  is the estimated level of culture participation for a individual who has a spouse with the same education. With six educational levels there are six parameter estimates that represent the diagonal population means ( $\alpha_{11}$  to  $\alpha_{66}$ ). If the model represents the data appropriately,  $p$  lies within the (0,1) interval (see Hendrickx et al. 1993:342).

<sup>14</sup> Diagonal reference models can be compared with the likelihood ratio test  $L$  using the estimator of the square root of the error variance  $\sigma$  of the nested models.  $L$  is estimated as  $(\sigma_f/\sigma_n)^N$ , where  $\sigma_f$  is the estimate of  $\sigma$  in the more general model,  $\sigma_n$  the estimate of  $\sigma$  in the nested model and  $N$  is the sample size (see Sobel 1985:705). Knowing that  $-2(\log)L$  has an asymptomatic  $\chi^2(r)$  distribution, with  $r$  additional parameters in the more general model, we can use this statistic for comparing the models.

<sup>15</sup> We also tested the possibility that over the life course spouses grow more similar and that, as a consequence, the impact of education will vary over the life course as well. Several tests with interaction effects between age (as a proxy for duration of marriage) and education for each cohort did not give any indication for such effects. Furthermore, we tried some other linear and nonlinear trend models with different  $\delta$  parameters for the upper and lower off-diagonal cells of the table. None of them resulted in a better representation of the data.

<sup>16</sup> According to Model F we take  $(1-p) + \delta$ , that is  $(1 - 0.623) + 0.063 = 0.44$  for the second

cohort, and  $(1-p) + \delta^*$ , that is  $(1 - 0.623) + 0.126 = 0.499$  for the youngest cohort.

## References

- Abbot, P. 1987. Women's Social Class Identifications: Does Husband's Occupation Make a Difference? *Sociology*, 21, 91–103.
- Acker, J. 1973. Women and Social Stratification: A Case of Intellectual Sexism. *American Journal of Sociology*, 78, 936–945.
- Baxter, J. 1994. Is Husband's Class Enough? Class Locations and Class Identity in the United States, Sweden, Norway and Australia. *American Sociological Review*, 59, 220–235.
- Brines, J. 1994. Economic Dependency, Gender, and the Division of Labor at Home. *American Journal of Sociology*, 100, 652–688.
- Britten, N. & Heath, A. 1983. Women, Men, and Social Class. In E. Garmarnikow (ed.), *Gender, Class and Work*. London: Heinemann.
- Collins, R. 1971. Functional and Conflict Theories of Educational Stratification. *American Sociological Review*, 36, 1002–1019.
- Crompton, R. & Mann, M. (eds.). 1986. *Gender and Stratification*. Cambridge: Polity.
- Davis, N. J. & Robinson, R. V. 1988. Class Identification of Men and Women in the 1970s and 1980s. *American Sociological Review*, 53, 103–112.
- De Graaf, N. D. 1991. Distinction by Consumption in Czechoslovakia, Hungary, and the Netherlands. *European Sociological Review*, 7, 103–112.
- De Graaf, N. D. & Ganzeboom, H. 1990. Cultuurdeelname en Opleiding: Een Analyse van Statusgroep Effecten met Diagonale Referentiemodellen (Culture Participation and Education: An Analysis of Status Group Effects with Diagonal Reference Models). *Mens en Maatschappij*, 65, 219–244.
- De Graaf, N. D. & Heath, A. 1992. Husbands' and Wives' Voting Behaviour in Britain: Class-dependent Mutual Influence of Spouses. *Acta Sociologica*, 35, 311–322.
- De Graaf, N. D., Nieuwbeerta, P. & Heath, A. 1995. Class Mobility and Political Preferences: Individual and Contextual Effects. *American Journal of Sociology*, 100, 997–1027.
- Dessens, J., Jansen, W. & Ultee, W. C. 1990. *Stratification 1974–1988*. Den Haag: OSA-Werkdocument W77.
- Erikson, R. 1984. Social Class of Men, Women and Families. *Sociology*, 18, 500–514.
- Fisher, F. M. 1966. *The Identification Problem in Econometrics*. New York: McGraw-Hill.
- Ganzeboom, H. 1982. Explaining Differential

- Participation in High-cultural Activities. In W. Raub (ed.), *Theoretical Models and Empirical Analyses*. Utrecht: ES Publications.
- Ganzeboom, H. 1984. *Cultuur en Informatieverwerking* (Culture and the Processing of Information). Utrecht: Dissertation.
- Ganzeboom, H. 1989. *Cultuurdeelname in Nederland* (Culture Participation in the Netherlands). Assen: Van Gorcum.
- Goldthorpe, J. 1983. Women and Class Analysis: In Defense of the Conventional View. *Sociology*, 17, 465–488.
- Goldthorpe, J. 1984. Women and Class Analysis: A Reply to the Replies. *Sociology*, 18, 491–499.
- Hanushek, E. A. & Jackson, J. E. 1977. *Statistical Methods for Social Scientists*. San Diego: Academic Press.
- Hayes, B. C. & Jones, F. L. 1992. Class Identification among Australian Couples: Are Wives' Characteristics Irrelevant? *The British Journal of Sociology*, 43, 463–483.
- Heath, A. F. & Britten, N. 1984. Women's Jobs do Make a Difference. *Sociology*, 18, 475–490.
- Hendrickx, J. De Graaf, N. D., Lammers, J. & Ultee, W. C. 1993. Models for Status Inconsistency and Mobility: A Comparison of the Approaches by Hope and Sobel with the Mainstream Square Additive Model. *Quality and Quantity*, 27, 335–352.
- Jöreskog, K. G. & Sörbom, D. 1989. *LISREL 7 User's Reference Guide*. Mooresville: Scientific Software.
- Kalmijn, M. 1991. Status Homogamy in the United States. *American Journal of Sociology*, 97, 496–523.
- Kmenta, J. 1986. *Elements of Econometrics*. New York: MacMillan.
- Knulst, W. P. 1989. *Van Vaudeville tot Video* (From Vaudeville to Video). Rijswijk: Sociaal en Cultureel Planbureau.
- Leiulforsrud, H. & Woodward, A. 1989. Cross-Class Encounters of a Close Kind: Class Awareness and Politics in Swedish Families. *Acta Sociologica*, 32, 75–93.
- Lesser Blumberg, R. 1978. *Stratification: Socio-economic and Sexual Inequality*. Dubuque: Brown.
- Lipset, S. M. 1960. *Political Man: The Social Bases of Politics*. London: Heinemann Educational Books.
- Mare, R. 1991. Five Decades of Educational Assortative Mating. *American Sociological Review*, 56, 15–32.
- Reid, I., & Stratta, E. 1989. *Sex Differences in Britain*. Aldershot: Gower.
- Scitovsky, T. 1976. *The Joyless Economy: An Inquiry into Human Satisfaction and Consumer Dissatisfaction*. Oxford University Press.
- Sewell, W. H., Hauser, R. M. & Wolf, W. C. 1980. Sex, Schooling and Occupational Status. *American Journal of Sociology*, 86, 551–583.
- Sixma, H. & Ultee, W. C. 1984. Marriage Patterns and the Openness of a Society: Educational Heterogamy in The Netherlands in 1959, 1977 and 1977. In B. F. M. Bakker, J. Dronkers & H. Ganzeboom (eds.), *Social Stratification and Mobility in The Netherlands*. Amsterdam: SISWO.
- Sobel, M. E. 1981. Diagonal Mobility Models: A Substantively Motivated Class of Designs for the Analysis of Mobility Effects. *American Sociological Review*, 46, 893–906.
- Sobel, M. E. 1985. Social Mobility and Fertility Revisited: Some New Models for the Analysis of the Mobility Effects Hypothesis. *American Sociological Review*, 50, 699–712.
- Sociaal en Cultureel Planbureau. 1988. *Aanvullend Voorzieningengebruik Onderzoek* (Additional Investigation into Use of Social and Cultural Facilities). Rijswijk: SCP.
- Sorensen, A. M. 1989. Husbands' and Wives' Characteristics and Fertility Decisions: A Diagonal Mobility Model. *Demography*, 26, 125–135.
- Sørensen, A. 1994. Women, Family and Class. *Annual Review of Sociology*, 20, 27–47.
- Sørensen, A. & McLanahan, S. 1987. Married Women's Economic Dependency, 1940–1980. *American Journal of Sociology*, 93, 659–687.
- South, S. J. & Spitze, G. 1994. Housework in Marital and Nonmarital Households. *American Sociological Review*, 59, 327–347.
- Stanworth, M. 1984. Women and Class Analysis: A Reply to John Goldthorpe. *Sociology*, 18, 159–170.
- Thompson, L., & Walker, A. J. 1991. Gender in Families. In A. Booth (ed.), *Contemporary Families*. Minneapolis: National Council on Family Relations.
- Treiman, D. J. & Hartmann, H. I. 1983. *Women, Work and Wages: Equal Pay for Jobs of Equal Value*. National Academy Press.
- Ultee, W. C. & De Graaf, N. D. 1991. Cultuurdeelname en Opleidingsverschillen in Primaire Relaties (Culture Participation and Educational Differences in Primary Relationships). *Gezin*, 3, 244–258.
- Van Berkel, M. & De Graaf, N. D. 1995. Economische Afhankelijkheid van Gehuwde Vrouwen in Nederland, 1979–1991 (Married Women's Economic Dependency in the Netherlands, 1979–1991). *Mens en Maatschappij*, 70, 138–151.
- Verbrugge, L. M. 1977. The Structure of Adult Friendship Choices. *Social Forces*, 56, 576–597.
- Weber, M. (1921) 1971. *Wirtschaft und Gesellschaft*. Tübingen: Mohr.

Appendix

Table A1. Spouses' culture participation and education. Cross-classification tables for each cohort.

HCP	Cohort 1						Cohort 2						Cohort 3												
	0	1	2	3	4	5	6	0	1	2	3	4	5	6	0	1	2	3	4	5	6				
WCP	0	41.0	4.3	1.4	0.2	0.1	0.0	46.9	23.3	5.0	1.4	0.2	0.1	0.0	0.0	30.0	23.2	5.4	0.7	0.2	0.1	0.0	0.0	29.6	
	1	5.5	12.7	2.0	0.5	0.2	0.0	21.0	7.3	14.2	3.4	0.8	0.4	0.1	0.0	26.3	5.4	19.6	2.9	0.8	0.3	0.1	0.0	29.1	
	2	1.9	2.3	7.3	1.5	0.4	0.2	0.0	13.6	2.4	4.5	7.4	2.1	0.5	0.2	0.1	17.2	1.9	5.1	8.2	2.1	0.3	0.2	0.0	17.8
	3	0.6	1.1	1.7	4.2	0.9	0.2	0.1	8.8	0.8	1.6	3.5	4.3	1.1	0.3	0.1	11.8	0.6	1.4	3.0	4.6	1.3	0.2	0.0	11.2
	4	0.4	0.4	0.6	0.8	2.4	0.4	0.1	5.0	0.2	0.5	1.3	1.9	3.1	0.7	0.1	7.8	0.1	0.4	0.8	1.4	3.1	1.0	0.2	7.0
	5	0.0	0.1	0.1	0.4	0.6	1.7	1.3	3.2	0.2	0.3	0.5	0.6	1.1	2.1	0.4	5.1	0.1	0.2	0.3	0.2	1.1	1.8	0.2	3.9
	6	0.0	0.0	0.2	0.1	0.1	0.5	0.5	1.5	0.1	0.0	0.1	0.1	0.3	0.5	0.8	1.9	0.0	0.0	0.1	0.1	0.1	0.5	0.6	1.4
		49.6	20.9	13.4	7.5	4.7	2.9	1.0	34.3	26.2	17.5	9.9	6.7	3.9	1.5	31.1	32.2	16.1	9.4	6.3	3.7	1.1			
IIED	WED	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6						
	1	33.4	14.6	2.7	5.0	2.3	0.3	58.6	11.5	9.4	1.8	4.0	1.9	0.3	28.8	5.4	5.0	1.7	2.4	0.7	0.3	15.4			
	2	3.1	7.4	1.1	2.5	1.0	0.2	15.2	4.4	11.0	1.6	4.8	2.7	0.3	24.7	2.8	11.3	1.7	4.4	1.3	0.3	21.9			
	3	1.3	2.0	2.2	3.4	2.5	0.7	12.0	1.7	3.5	2.2	4.7	3.4	1.1	16.5	1.9	4.2	2.8	5.2	1.7	0.6	16.4			
	4	0.7	1.5	0.8	3.1	2.4	1.6	10.3	0.9	2.9	1.6	7.2	4.8	3.3	20.7	1.9	7.3	2.4	12.2	5.8	3.2	32.8			
	5	0.1	0.1	0.4	0.8	1.4	0.7	3.5	0.2	0.3	0.3	1.6	3.5	1.9	7.7	0.1	0.5	0.3	2.9	4.1	2.3	10.1			
	6	0.0	0.0	0.1	0.0	0.1	0.5	0.7	0.0	0.1	0.0	0.1	0.2	1.1	1.6	0.0	0.0	0.1	0.7	0.4	2.1	3.4			
		38.6	25.7	7.3	14.8	9.7	3.9	18.6	27.2	7.4	22.3	16.3	8.1	12.1	28.3	9.1	27.8	14.0	8.8						

Note: WCP: wife's culture participation, HCP: husband's culture participation, WED: wife's education, HED: husband's education. Cohort 1: wife born before 1935 (N = 3,100), Cohort 2: wife born between 1935 and 1949 (N = 3,540), Cohort 3: wife born after 1949 (N = 2,725).  
Source: Additional Investigation into Use of Social and Cultural Facilities, AVO 1979/1983/1987.

Table A2. Covariance matrices analysed.

	WCP	HCP	WED	HED	INC	AGE	URB	CH1	CH2
<b>Cohort 1</b>									
WCP	0.826								
HCP	0.656	0.811							
WED	0.307	0.275	0.745						
HED	0.356	0.362	0.473	0.860					
INC	0.295	0.282	0.371	0.496	0.913				
AGE	-0.075	-0.057	-0.080	-0.078	-0.173	0.516			
URB	0.015	0.020	0.026	0.038	0.026	0.021	0.233		
CH1	0.001	0.000	0.000	0.000	0.000	-0.001	0.000	0.002	
CH2	-0.002	-0.002	0.000	-0.002	0.006	-0.036	-0.006	0.001	0.016
<b>Cohort 2</b>									
WCP	0.901								
HCP	0.669	0.885							
WED	0.368	0.331	0.885						
HED	0.378	0.378	0.503	0.919					
INC	0.307	0.296	0.377	0.489	0.911				
AGE	-0.011	-0.021	-0.050	-0.044	-0.017	0.282			
URB	0.007	0.023	-0.001	-0.004	0.003	-0.002	0.208		
CH1	-0.006	0.003	0.038	0.039	0.012	-0.059	-0.004	0.112	
CH2	0.001	-0.004	-0.002	0.009	-0.018	-0.098	-0.009	0.001	0.248
<b>Cohort 3</b>									
WCP	0.900								
HCP	0.700	0.890							
WED	0.355	0.342	0.915						
HED	0.340	0.372	0.485	0.926					
INC	0.273	0.266	0.326	0.391	0.913				
AGE	0.006	-0.007	-0.006	0.013	0.026	0.112			
URB	0.049	0.066	0.029	0.040	0.017	-0.005	0.219		
CH1	-0.105	-0.085	-0.026	-0.004	-0.098	-0.017	-0.024	0.250	
CH2	-0.050	-0.056	-0.095	-0.079	-0.062	0.059	-0.011	-0.031	0.216

*Note:* WCP: wife's culture participation, HCP: husband's culture participation, WED: wife's education, HED: husband's education, INC: household income, AGE: wife's age, URB: urbanization, CH1: children aged 0-4, CH2: children aged 5-11. Cohort 1: wife born before 1935 (N = 3,100), Cohort 2: wife born between 1935 and 1949 (N = 3,540), Cohort 3: wife born after 1949 (N = 2,725).

*Source:* Additional Investigation into Use of Social and Cultural Facilities, AVO 1979/1983/1987.

Table A3. *Parameter estimates for the effects on spouses' levels of culture participation (model  $\chi^2$  15.19 df 17 from Table 1). Standard errors in parentheses.*

	Husband's culture participation	ss	Wife's culture participation	ss
<b>Cohort 1</b>				
Husband's culture participation			0.834** (0.307)	0.826
Wife's culture participation	0.686** (0.053)	0.693		
Husband's education	0.125** (0.022)	0.128		
Wife's education			0.089** (0.016)	0.084
Wife's age	0.015 (0.014)	0.012	-0.032** (0.014)	-0.026
Household income	0.022** (0.004)	0.022	0.022** (0.004)	0.022
Urbanization	0.001 (0.007)	0.000	0.001 (0.007)	0.000
<b>Cohort 2</b>				
Husband's culture participation			0.868** (0.039)	0.860
Wife's culture participation	0.746** (0.040)	0.753		
Husband's education	0.091** (0.017)	0.093		
Wife's education			0.088** (0.016)	0.087
Wife's age	-0.041* (0.020)	-0.023	0.033 (0.020)	0.019
Household income	0.022** (0.004)	0.022	0.022** (0.004)	0.022
Urbanization	0.097** (0.016)	0.047	-0.074** (0.019)	-0.035
Children aged 0-4	-0.039** (0.010)	-0.014	-0.039** (0.010)	-0.014
Children aged 5-11	-0.006 (0.005)	-0.003	-0.006 (0.005)	-0.003
<b>Cohort 3</b>				
Husband's culture participation			0.776** (0.036)	0.768
Wife's culture participation	0.776** (0.036)	0.783		
Husband's education	0.098** (0.016)	0.100		
Wife's education			0.098** (0.016)	0.098
Wife's age	-0.113** (0.033)	-0.040	0.084* (0.033)	0.030
Household income	0.022** (0.004)	0.022	0.022** (0.004)	0.022
Urbanization	0.097** (0.016)	0.047	-0.031 (0.021)	-0.015
Children aged 0-4	-0.003 (0.026)	-0.002	-0.136** (0.024)	-0.071
Children aged 5-11	-0.006 (0.005)	-0.003	-0.006 (0.005)	-0.003

*Note:* ss coefficients are within group standardized solutions. Cohort 1: wife born before 1935 (N = 3,100), Cohort 2: wife born between 1935 and 1949 (N = 3,540), Cohort 3: wife born after 1949 (N = 2,725).

*Source:* Additional Investigation into Use of Social and Cultural Facilities, AVO 1979/1983/1987.  
\* significant  $p < 0.05$  \*\* significant  $p < 0.01$ .