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Change and Stability in the Social Determinants of Divorce: A Comparison of Marriage Cohorts in the Netherlands

Paul M. de Graaf and Matthijs Kalmijn

This article addresses historical developments in the effects of five social determinants of divorce in the Netherlands: parental socioeconomic status, educational attainment, religion, parental divorce, and having children. Employing a national survey with information about 1,356 divorces, from 6,164 marriages formed between 1942 and 1999, event-history models show that the effects of most social determinants of divorce are stable. The effects of parental socioeconomic status, religion, parental divorce, and having children have not changed over marriage cohorts. The one and only exception lies in education. The effect of education has changed from a positive effect to a negative effect. In times when divorce was uncommon, the higher educated were more likely to divorce than the lower educated. Presently, the lower educated are more likely to divorce than the higher educated. This trend confirms Goode's long-standing but rarely tested hypothesis about the reversing effect of social class on divorce.

Introduction

More than 40 years ago, the renowned sociologist William Goode presented a theory about the changing social determinants of divorce. Goode argued that in times when divorce was rare, it would primarily be the members of the elite in a society who experienced the break-up of a marriage. When legal and normative barriers against divorce are lifted, divorce becomes more common and the lower classes would also begin to experience divorce. Eventually, the class differential in divorce would be reversed. In other words, before the trend towards high levels of divorce, the higher classes would divorce more frequently, whereas at the end of this trend, the lower classes would divorce more often (Goode, 1962).

The reasoning behind Goode's thesis was loosely based on a notion of innovation. A divorce is not the same as an innovation in a technological sense, but it certainly has elements in it of an innovation. One thing is that a divorce was a new form of behaviour that intended to solve a problem (e.g. a poorly functioning marriage). Another aspect of divorce was that it increased very quickly in a short period of time, suggesting that a diffusion process was going on. These considerations lead to a theory about how the innovation diffusion process takes form. It is usually the more secure and more enlightened classes in a society who are the early adopters of an innovation because these classes have more cultural resources, which make them better able to deal with the possible sanctions associated with

breaking social norms. For that reason, Goode expected a positive effect of class on divorce. This innovation would eventually trickle down to the lower classes because the barriers to divorce became weaker. That divorce would eventually become more common among the lower classes was not part of the theory but was explained in different terms, especially by referring to the greater social and economic problems in lower class families—Goode spoke of ‘family strain’ (Goode, 1951, 1962).

Goode also tried to test his theory by pooling tables of divorce by various indicators of socioeconomic status for a range of countries. Comparing countries with high and low rates of divorce, he could indirectly test his diffusion theory. Although he compared as many as 12 countries, he was not convinced by their comparability and regarded the results as preliminary (though encouraging). In his last work on divorce, 30 years later, Goode did come back to his thesis briefly but without completing the test (Goode, 1993). He nevertheless emphasized that in modern times, the class differential was negative—with more divorce occurring in the lower classes. In his early work, the tests were also somewhat slippery in that the dates of the ‘early’ and ‘later’ period of the innovation were never clearly defined.

In this article, we re-examine Goode’s thesis in a longitudinal perspective by comparing the divorce risks of marriage cohorts in a single country. We will look not only at historical developments in the effects of educational level and parental socioeconomic status—as indicators of class position—but also at developments in other social determinants of divorce: religion, having experienced a parental divorce, and having children. We will explore whether Goode’s hypothesis about innovators and followers can be generalized to developments in the effects of these other social determinants.

If one can generalize Goode’s thesis, one would expect that when divorce is rare, not only the higher classes but also the secular part of the population, the couples without children, and the persons who experienced a parental divorce are more likely to divorce. The non-religious, the couples without children, and so forth are better able to break social norms. As divorce becomes more common, every category in society experiences higher chances to divorce, but the trend for the innovators will be weaker than the trend for the adopters (the lower classes, the religious, the couples with children, and the persons without divorced parents). As a result, we expect that in the early period—the period before the divorce rates started to increase—most effects of social determinants will be strong. At the end of the divorce

trend, the effects will have declined in strength. In a sense, divorce has become more ‘democratic’ and other perhaps more psychological reasons may become most influential in understanding who divorces (De Graaf and Kalmijn, in press).

Although the underlying general reasoning is based on the notion of innovation diffusion, there are also more specific arguments for the different social determinants. For the effect of religion, an additional argument is that the influence of the church on all spheres of life has become weaker over time (Zegers *et al.*, 1997). Dutch Catholics are a good example of this trend. Since the 1960s, The Dutch Catholic church has had conflicts with the Vatican for being too liberal on moral issues. Since then, many people label themselves as Catholic, without having strong ties to the official doctrine of the Vatican, which will have decreased the difference in the divorce rates of Catholics and non-church members.

For parental divorce, the argument about trends is somewhat more complex. There are two basic reasons for the intergenerational transmission of divorce: social learning and socialization of liberal norms. When divorce becomes more common, the parental experience becomes less central. Regardless of whether people have divorced parents, they see that other people in their surroundings experience a divorce. Hence, learning and socialization are shifted to the network so that the role of the parents may have become less influential. Wolfinger (1999) has argued that stigma is involved and that the stigma attached to divorce has declined over time. Although we do see that the children of divorce can be stigmatized, it is less clear why there would be an effect of stigma on a person’s own divorce.

The effects of children on divorce are well-documented empirically, although discussion remains whether the effect is because of protection or selection effects (the divorce-prone postponing childbirth). Although the general expectation is that the effect of children has weakened over time, there may also be counter pressures. One reason is that the selection effect may have increased. When divorce is common, married couples will think more carefully about the quality of their union before they have children. Hence, childless couples may increasingly be composed of couples with poor marital quality. People may also have become more and more aware of the harmful effect of divorce on children so that the divorce rate of couples with children may have declined or increased less quickly than the divorce rate for the couples without children. All these arguments

suggest an increase rather than a decline in the effect of having children.

Prior research on changes in the social determinants of divorce has not often been performed, partly because of data limitations. Most datasets that can be used to analyse divorce are too small to make good comparisons across marriage cohorts. We first discuss some results for the United States. In one of the more comprehensive analyses of trends, Teachman (2002) compares marriage cohorts in the United States who married between 1950 and 1984. Teachman looks at education, parental divorce, religion, and race (among other variables) and finds stability in the effects of these variables on the risk of divorce. In an analysis of the effect of parental divorce on the risk of divorce in the pooled General Social Surveys in the United States, Wolfinger (1999) finds a decline in the effect of parental divorce across survey years, in contrast to what Teachman's comparison of marriage cohorts showed. For the effect of education on divorce, contrasting American findings exist. South (2001) finds no change in the effect of wife's education over time, whereas McLanahan (2004), citing unpublished research by Martin, finds an increase in the effect of education, with a much higher risk of divorce for high school dropouts than for high school graduates in the most recent period.

Research in Europe is more scarce. Perhaps one of the earliest analyses of the European context was provided by Hoem (1997). Using Swedish register data and comparing birth cohorts of married women between 1944 and 1964, Hoem finds that in the 'low'-divorce era, educational groups did not differ in their risk of divorce (Hoem, 1997). Trends occurred in all educational categories, but the trend was stronger in the *lower* educational categories, causing an *increase* in the effect of education on the risk of divorce. Although the negative status effect on divorce in the recent era is in line with Goode's observations, the fact that the groups initially did not differ is not in line with Goode's idea that the higher social groups are innovators. Other European trend analyses have been performed for the effect of parental divorce in the Netherlands and Germany. For the Netherlands, Dronkers (1997) finds no significant change, and for Germany, Diekmann and Engelhardt (1999) find a slight decrease in the effect of parental divorce. A limitation is that both studies were based on a comparison of only two cohorts.

Next to trend analyses, there have also been comparisons of educational effects on the risk of divorce across countries. Blossfeld *et al.* (1995) compare the effects of women's education on divorce in these three countries

and hypothesize along the lines of Goode that in countries where the divorce rate is low, the liberating effect of education will be strong because 'in such societies, marital disruption represents a more severe violation of an established social norm' (p. 202). Increases in the divorce rate signify a weakening of such norms and women's educational resources will no longer have an effect on divorce. In line with the hypothesis, Blossfeld *et al.* (1995) find that the disruptive effect of women's higher education is strongest in Italy, lower in Germany, and lowest in Sweden.

Presenting Dutch data, we hope to say something new about the Western European case in a general sense. Divorce in the Netherlands in the 1980s was as common as it was in France, Germany, Switzerland, and Austria (Goode, 1993; Blossfeld and Muller, 2002). Compared with other European countries and the United States, the divorce rates of these Western European countries are at an intermediate level. Southern European countries have substantially lower divorce rates, and Northern European countries and in particular the United States have higher levels of divorce. Prior research on the determinants of divorce shows that the Netherlands is not a special case. Most of the determinants that were found elsewhere were also found for the Netherlands (Manting, 1994; Fokkema and Liefbroer, 1999; Poortman, 2002; Poortman and Kalmijn, 2002; Kalmijn, 2003; Kalmijn *et al.*, 2004; Kalmijn *et al.*, 2005). One exception is that Kalmijn *et al.* (2004) found a positive effect of the wife's education on divorce and a negative effect of the husband's education. The positive effect of the wife's education is usually not found in contemporary data and is attributed by the authors to more liberal attitudes on family issues among higher educated women.¹ In terms of trends, finally, the Dutch case is similar to that of other Western European societies as well, except perhaps that the trend was quite rapid: between 1965 and 1985, the entire increase in divorce in the Netherlands occurred. After 1985, there were fluctuations in the trend, but little systematic change can since then be observed (Statistics Netherlands, 1999).

Data and Models

To assess trends in the determinants of divorce, we analyse a recently collected survey among 8,155 respondents in the Netherlands, the Netherlands' Kinship Panel Study (NKPS) of 2003 (Dykstra *et al.*, 2004b). The NKPS

is a national and representative sample of individuals in the Netherlands, aged 18–79 years. Interviews were held with respondents at home and use was made of additional self-completion booklets. The overall response rate was 45 per cent, which is about average for the Netherlands (Dykstra *et al.*, 2004a).

The data include detailed questions about the respondent's marriage history. Information was collected on all the respondent's marriages, including information on beginning dates, ending dates, and type of ending. Time-varying information on children was also collected for each marriage. Using these data, we have information on 6,164 marriages of which 1,356 ended in divorce (621 ended in the death of a spouse). These marriages were formed from the early 1940s to the late 1990s.²

We use discrete-time event-history models, which in this case, amount to applying logistic regression to a person-year file. Our dependent variable is the risk of divorce, given that one is still living together in the year before. Only marriages are considered. To control for duration dependency in the event-history analyses, we include a series of dummy variables for each 3-year group of durations (except for the first year, which is treated as a separate dummy). Note that the event-history starts in the year in which the couple began living together, regardless of whether the couple started out as married or unmarried. Marriages ending in the death of a spouse were censored.

We cannot analyse the role of premarital cohabitation. This topic is important, but our data do not have information on cohabitation before marriages that have ended in divorce. The data do have information on cohabitation

before existing marriages and also have separation of cohabiting couples who have not married. However, if one wants to analyse premarital cohabitation systematically, one needs to analyse cohabiting relationships that do not end in marriage and one needs to analyse transitions from cohabitation to divorce *and* to marriage (Oppenheimer, 2003).

The independent variables that we construct are the following:

Marriage Cohort

We estimate trends in the determinants of divorce by comparing marriage cohorts (for a similar approach, see Teachman, 2002). To make a meaningful breakdown in marriage cohorts, we first look at the trend. In Figure 1, we present descriptive information on the probability of divorce by year of cohabitation, as obtained from our survey. The figure shows that divorce was uncommon in the cohorts until the early 1960s. After that point, divorce increased rapidly to a high level in the early 1980s. After that, the rate remained high. In the last couple of marriage years, the figure displays a decline in the divorce rate, but this trend is artificial, because many marriages start with a period of cohabitation. Because all marriages have survived this period by definition, the probability of separation is low in the early years of cohabitation. From this graph, we can make a distinction in the cohort before the trend (1940–1964), the cohort of the trend (1965–1979), and the post-trend cohort, which we break up into two, the early high-divorce cohort (1980–1989) and the late high-divorce cohort (1990–2000).

Figure 1 Probability of divorce by year of marriage in the Netherlands 1940–2000.

(1990–2000). In each cohort, we have a reasonable number of divorces in our data: 218 (pre-trend cohort), 605 (trend-cohort), 367 (early post-trend cohort), and 159 (late post-trend cohort). Note that although strictly speaking these cohorts are cohabitation cohorts, we will refer to them as marriage cohorts.

Educational Attainment

The highest completed level of schooling was broken down into eight categories. For most models, we use the approximate number of years of schooling that is formally needed to complete the level (De Graaf and Ganzeboom, 1993). In the analyses, education is standardized (with mean 0 and standard deviation 1). For the graphic presentations, we break down the educational level into four categories (primary, lower secondary, higher secondary, and tertiary).

Parental Socioeconomic Status

Next to education, we look at ascribed bases of status. More specifically, we use three indicators: (i) father's years of schooling, (ii) mother's years of schooling, and (iii) the father's occupation when the respondent was 15 years of age. Detailed occupational information was collected, and this was recoded into the well-known ISEI scale (Ganzeboom *et al.*, 1992). The three indicators of status were standardized, summed, and the resulting scale was standardized again. We believe that parental socioeconomic status may have additional effects on divorce and may be used as an additional test of the Goode hypothesis, which is not specifically about education but about status more generally. Note that we do not have detailed occupational histories so that we cannot include time-varying information on the respondent's own employment, income, and occupation.

Parental Divorce

All respondents have been asked whether their parents ever divorced, and if so, at what age this happened. We coded all respondents whose parents divorced before age 18 years as 1 (0 otherwise).

Religion

We have information whether the parents were church members, and if so, from which church. We make a distinction in (i) Catholics, (ii) reformed Protestants, (iii) orthodox Protestants, and (iv) other religions and missings. Category (iii) is most traditional in its outlook on family issues, whereas category (ii) is most liberal. The

group of Catholics is probably heterogeneous, with both traditional and liberal members. We also have information on the respondent's own religious preferences, but this applies to the moment of the survey. Religious membership can change in response to life course events (Stolzenberg *et al.*, 1995), so that it is better to use parental religion. There were about 5 per cent missing cases on this variable, because this information was taken from the self-completion booklet, which was not returned in some cases. Non-church members are the reference group.

Children

For each marriage, the respondents have been asked whether there were any children born in the marriage, and about the date of birth of the children. To simplify things, we simply included a time-varying dummy variable indicating whether the couple had children. This includes couples with children living independently.

Finally, we include many control variables: the age at living together, whether the respondent was ever married before (8 per cent), whether the respondent was of Caribbean descent, and the respondent's sex. We combine men and women and hence the effects of individual characteristics on divorce are the average of the effects of men and women's characteristics. We abstain from exploring whether there are sex differences in the effects. Means and standard deviations are summarized in Table 1.

Findings

Table 2 summarizes the baseline model of our analysis. This discrete-time event-history model includes all independent variables, assuming that their effects on divorce are equal over marriage cohorts. The effect of duration has the expected functional form: divorce is not likely in the first years of marriages, and then the likelihood increases. The distinction we made between four marriage cohorts proves to be sensible. Divorce is least likely in the pre-trend cohort, then increases strongly in the trend cohort, and stabilizes in the two post-trend cohorts. Note that these cohort differences are net of the changes caused by the changing composition of the population with regard to the other variables in the model.

The five social determinants that interest us in this article all have significant effects on the divorce risk when all marriage cohorts are combined. Interestingly, the overall effect of parental socioeconomic status on

Table 1 Descriptive statistics of all variables in the analysis: means and standard deviations

	Range	Mean	Standard deviation
Female respondent	0/1	0.60	
Relationship duration	0–60	15.6	11.8
Marriage cohort			
1942–1964	0/1	0.21	
1965–1979	0/1	0.35	
1980–1989	0/1	0.24	
1990–1999	0/1	0.20	
Parental socioeconomic status (standardized)	–1.83 to 3.59	0.00	1.00
Religion of parents			
No religion	0/1	0.15	
Catholic	0/1	0.40	
Reformed Protestant	0/1	0.18	
Orthodox Protestant	0/1	0.14	
Other religion or missing	0/1	0.13	
Parents divorced	0/1	0.07	
Respondent Caribbean descent	0/1	0.01	
Respondent's education (standardized)	–2.29 to 2.58	0.00	1.00
Age at living together	14–72	25.2	4.9
Respondent ever divorced before (yes = 1, no = 0)	0/1	0.12	
Had a child (time-varying)	0/1	0.78	
Number of person-years		153047	
Number of marriages		6164	
Number of divorces		1356	

Notes: For time-constant variables, means refer to marriages. For time-varying variables, means refer to period file. Standard deviations not presented for dichotomous variables. Standardized variables are standardized marriages.

Source: Netherlands Kinship Panel Study.

divorce is positive, whereas the overall effect of respondent's education is negative. In other words, the higher educated are generally less likely to divorce, but respondents from higher status backgrounds are more likely to divorce, holding constant their own education. In standardized terms, the positive parental status effect is stronger than the negative educational effect.

Religion has a clear negative effect on divorce. Especially the Reformed and the Orthodox Protestant respondents have a lower overall risk of divorce than the non-religious, whereas the divorce risk of the Catholics is in the middle. The overall effect of a parental divorce is significant and substantial: People who have divorced parents (when they were growing up) have a 1.9 times higher odds of divorce than others. Having children is associated with a 29 per cent lower odds of divorce.

Several control variables have significant effects as well. There is a negative effect of union age. Hence, respondents who began living with each other at a young age are more likely to divorce. We also see that respondents who were divorced before have a higher risk of divorce in their subsequent union (their odds of divorce

are 2.6 times higher). Finally, respondents of Caribbean descent are two times more likely to divorce than Dutch respondents.

In Table 3, we look at models that include cohort interactions. Because duration and cohort are strongly associated—older cohorts are observed at both short and long marriage durations, whereas younger cohorts are only observed at short marriage durations—we need to include duration interactions in the model. For this interaction term, we applied a logarithmic transformation to duration, because it is reasonable to assume that when an effect changes over the course of marriage, it will change most rapidly in the beginning of marriage. The log duration variable is subsequently standardized so that between-cohort differences in the effects of the independent variables are interpreted at assumed marriage duration of an average marriage duration, which is about 12 years. We will pay brief attention to the size and interpretation of the duration interactions after we have discussed the cohort interactions.

We test cohort interactions in two ways. First, we look at how the fit of the model improves when the set of

Table 2 Event-history analysis of divorce in the Netherlands

	b	Standard error	P
Female respondent (vs. male)	0.093	0.059	0.12
Duration			
Year <1	-1.131*	0.244	0.00
Years 1–3 (reference)	0.000	—	—
Years 4–6	0.488*	0.107	0.00
Years 7–9	0.528*	0.112	0.00
Years 10–12	0.543*	0.118	0.00
Years 13–15	0.699*	0.119	0.00
Years 16–18	0.394*	0.134	0.00
Years 19–21	0.507*	0.137	0.00
Years >21	0.084	0.117	0.47
Marriage cohort			
1942–1964 (reference)	0.000	—	—
1965–1979	0.751*	0.082	0.00
1980–1989	0.797*	0.094	0.00
1990–1999	0.635*	0.117	0.00
Parental socioeconomic status (standardized)	0.173*	0.032	0.00
Religion of parents			
No religion (reference)	0.000	—	—
Catholic	-0.147	0.078	0.06
Reformed Protestant	-0.355*	0.096	0.00
Orthodox Protestant	-0.332*	0.105	0.00
Other religion or missing	-0.002	0.096	0.98
Parents divorced	0.617*	0.086	0.00
Respondent Caribbean descent	0.686*	0.170	0.00
Respondent's education (standardized)	-0.096*	0.032	0.00
Age at living together	-0.032*	0.006	0.00
Respondent ever divorced before	0.962*	0.080	0.00
Had a child (time-varying)	-0.342*	0.071	0.00
Intercept	-4.621*	0.202	0.00
Model fit (Chi-square)	687		
Degrees of freedom	23		
Number of person-years	153047		
Number of marriages	6164		
Number of divorces	1356		

* $P < 0.05$.

Source: Netherlands Kinship Panel Study.

interactions is added to the model. This is performed with a Chi-square test. Second, we look at the interaction effects themselves. The first cohort is the omitted category, so that the main effect of an independent variable is the effect in the pre-trend cohort. The interaction effects tell us whether the effect of that particular independent variable is weaker or stronger in the specific cohort compared to the pre-trend cohort.

In Table 3, we present separate models of the historical developments in the effects of each of the five social determinants of divorce. We have chosen not to present a model in which all cohort interactions are estimated

simultaneously, because this would ask too much of the statistical power of the data. For models addressing the between-cohort variation in the effects of parental socioeconomic status and respondent's education, we present both separate interaction models and a simultaneous interaction model. This is performed to explore whether changes in the effects of one stratification variable are affected by changes in the effects of the other stratification variable.

Models 1–4 of Table 3 all refer to trends in the effects of parental socioeconomic status and education on divorce. The four models differ in the extent to which the effects of

Table 3 Developments in the divorce risk of marriages: interactions effects by marriage cohort from event-history models

	Main effect			Interaction effect			Interaction effect			Interaction effect			Test of all interactions			
	Cohort 1942–1964			Cohort 1965–1979			Cohort 1980–1989			Cohort 1990–1999			Duration (z-score)			
	b	P		b	P		b	P		b	P		b	P	Chi-square	
Parental socioeconomic status (model 1)	0.357*	0.00		-0.169*	0.04		-0.244*	0.01		-0.296*	0.01		0.024	0.52		11.6*
Respondent's education (model 2)	0.108	0.11		-0.219*	0.00		-0.247*	0.01		-0.377*	0.00		0.081*	0.02		25.0*
Parental socioeconomic status (model 3)	0.261*	0.00		-0.067	0.47		-0.144	0.15		-0.152	0.24		-0.013	0.74		
Respondent's education (model 3)	0.067	0.37		-0.187*	0.03		-0.185	0.06		-0.308*	0.02		0.086*	0.03		27.5*
Respondent's education (model 4)	0.183*	0.01		-0.227*	0.00		-0.252*	0.01		-0.369*	0.00		0.081*	0.02		24.8*
Had a child (model 5)	-0.366	0.09		-0.150	0.52		0.167	0.49		0.160	0.55		-0.039	0.67		6.3
Religion of parents (model 6)																
Catholic	-0.187	0.34		-0.070	0.76		0.305	0.23		-0.128	0.68		-0.096	0.32		13.2
Reformed Protestant	-0.298	0.17		-0.159	0.54		0.221	0.46		-0.491	0.23		-0.066	0.58		
Orthodox Protestant	-0.251	0.31		-0.273	0.35		0.025	0.94		0.280	0.47		0.016	0.91		
Parents divorced (model 7)	0.524*	0.04		0.229	0.43		-0.103	0.73		-0.079	0.81		-0.196	0.06		6.1
																0.19

* $P < 0.05$.

Note: Duration is first logged and then standardized (main effects thus apply to the average duration).

Model 1 includes parental status and education and cohort interactions with parental status.

Model 2 includes parental status and education and cohort interactions with education.

Model 3 includes parental status and education and cohort interactions with education and parental status.

Model 4 includes education and cohort interactions with education and does not include parental status.

Models 5, 6, and 7 include all variables and the cohort interaction with the specified variable only.

Source: Netherland Kinship Panel Study

parental socioeconomic status and education are controlled for each other. According to the Chi-square statistics, we can reject the hypothesis that the effects of stratification variables are equal over cohorts (last column).

Model 1 includes effects of parental socioeconomic status and education and cohort interactions with parental socioeconomic status only. According to the estimates of this model, the effect of parental socioeconomic status has decreased significantly over cohorts. In the pre-trend cohort, the effect of parental socioeconomic status on divorce was positive, and in the trend cohort and post-trend cohorts, the effect has decreased to almost zero. Model 2 also includes parental socioeconomic status and education, but now only includes cohort interactions with education. According to the estimates of Model 2, the effect of education has decreased from an insignificant effect in the pre-trend cohort to negative effects in the later cohorts. Model 3 includes the cohort interactions of parental socioeconomic status and education simultaneously. The estimates of Model 3 indicate that there is no change in the effects of parental socioeconomic status on divorce but that the downward trend in the effect of education remains significant. In Model 4, we show the estimates of a model that leaves out the effects of parental socioeconomic status completely. The effect of education was positive in the pre-trend cohort, became negative in the trend cohort, and more negative in the post-trend cohorts. From Models 1–4, we conclude that the positive effect of parental status has been stable over marriage

cohorts and that the sign of the effect of education has been reversed from positive to negative. The trend of the education effect is in line with Goode's hypothesis, but the stability of the effect of parental status is not.

The question remains why the parental status effect is more positive in each cohort than the education effect. We think that the effect of education may be the product of a range of issues, some of which have positive effects on divorce (cultural resources), others of which may have negative effects on divorce (economic security, communication skills). The parental status effect may have less to do with these individual skills and therefore lean more towards a positive effect.

Because education is treated as an interval variable, it is also useful to consider how educational categories differ in their risk of divorce and how these differences have changed over cohorts. To assess this, we constructed dummy variables for education and interacted these with the cohort dummies. Because this results in many effects that are difficult to interpret, we present the results of this interaction model graphically. Figure 2 shows the effects of education for the four marriage cohorts of Model 4, but now broken down by detailed educational categories. The figure makes clear that in the pre-trend cohort, marriages of the tertiary educated had the highest divorce risk and that marriages of the primary educated and lower secondary educated had the lowest divorce rate. This has changed considerably over cohorts. In the trend-cohort, the primary educated have the highest divorce risk, together the higher secondary

Figure 2 Relative divorce risk by level of education and marriage cohort.

educated. In the post-trend cohorts, the tertiary educated and those with higher secondary education have the lowest divorce risks. Note that the order of the divorce risk of the four educational categories is not completely consistent with the levels of education of these categories for all marriage cohorts.

The effects of parental divorce, religion, and having children on divorce (Models 5, 6, and 7) have not changed over cohorts. None of the Chi-square tests are statistically significant, and there are no significant interaction effects with the cohort dummies. For a more parsimonious test of the interaction between religion and cohort, we have also looked at a combination of the three denominations in one single variable, indicating that the respondent has been socialized in a Christian family. This more parsimonious model does not make the cohort interaction significant (not reported in Table 3). When we look at the cohort interactions for parental divorce in more detail, we note that the effect seems strongest in the trend-cohort and weakest both before and after the trend. When we test this contrast, the change is marginally significant ($P = 0.08$). If one accepts this as valid, it points to a non-linear pattern of change, with the trend cohort as being different from the rest.

All models include duration interactions, and only the interaction between education and duration proves significant (Models 2, 3, and 4). The effects of education become more positive (i.e. less negative) over marriage duration. Apparently, the higher divorce risk of the lower educated is especially prominent in the first years of the union and then becomes smaller. A similar pattern was observed by South (2001) in the United States.

Conclusion

In this article, we have studied the influence of five well-known social determinants of the risk of divorce: education, parental social status, religion, parental divorce, and children. Using a comparison of marriage cohorts in the Netherlands, we have examined whether the effects of these factors have changed. Educational attainment is the only social determinant of divorce for which the effect has changed over time. In the cohorts who married before the trend towards increasing divorce rates started, the higher educated had a higher risk of divorce than the lower educated. Since then, the divorce risk of the lower educated increased much more than the divorce risk of the higher educated, and as a result, the sign of the relationship has reversed. Currently, the lower educated have a higher divorce risk than the higher educated.

Our finding confirms Goode's classic thesis about the social diffusion of divorce. Goode argued that in a period of low divorce, only the higher strata were able to break normative and legal barriers to divorce. Over time, divorce became more common, and this 'innovation' trickled down to the lower classes. Goode's thesis has rarely been tested before, although work by Hoem on Sweden has also pointed in this direction (Hoem, 1997). Our findings are in line with those of Hoem, except that we find a clearer positive educational effect in the early period. Our findings are also in line with McLanahan's observation (2004) that in the United States, parental divorce and single parenthood have increasingly become lower class phenomena.

The reasons why education now has a negative effect on divorce remain debated, however. Some authors point to the socioeconomic hardship facing the lower educated (Cherlin, 1979; Voydanoff, 1990; Goode, 1993; Jalovaara, 2003), whereas others point to a possible lack of communication skills and cognitive resources that are needed to make a relationship work (Herrnstein and Murray, 1994; South, 2001; Dronkers, 2002). The negative effect of education on divorce is even somewhat surprising in the light of the positive effects of education on other 'modern' demographic transitions (e.g. cohabitation, late childbearing) and the positive effects of education on liberal attitudes towards marriage, divorce, and family issues (Lesthaeghe and Meekers, 1986; Thornton and Young-DeMarco, 2001; Gelissen, 2003). The lower risk of divorce among the higher educated apparently occurs despite these more modern value orientations.

That the divorce risk is higher in lower educated groups is also of more general importance in society, given the well-known negative effects of divorce on children's well-being (McLanahan and Sandefur, 1994). Whereas higher educated parents can sometimes protect their children from the consequences of divorce by offering them high cultural and socioeconomic resources, lower educated parents are often unable to provide this compensation. Research has shown that the negative effects of divorce on children's well-being are more serious among lower educated mothers (Jonsson and Gähler, 1997; Fischer, 2004). The changing educational effect on divorce therefore implies that the position of the children of divorce in the Netherlands has become increasingly fragile (McLanahan, 2004).

The changes we observe in the effect of education also raise questions about the role of cohabitation. Cohabitation has increased over time, and it is known that the higher educated are more likely to cohabit than the lower educated (Manting, 1994). Furthermore, the

higher educated who cohabit are less likely to change their union into a marriage than the lower educated (Manting, 1994). In combination, these two processes raise a question about selectivity. If the higher educated who still marry are increasingly a select group (perhaps an increasingly traditional and thus stable group), this may have contributed to the reversal of the educational effect on (marital) divorce. These issues can only be examined with complete time-varying information about the legal status of all the unions that a person had in the past. Unfortunately, our survey has incomplete data in this respect—it has time-varying information about the legal union status only for the current union, not for past unions.

The effects of parental socioeconomic status, religion, parental divorce, and having children have not changed over marriage cohorts. Maybe that even larger datasets are necessary to reveal such trends, but such data are not available in the Netherlands. For the moment, however, it is clear that our main hypothesis that the effects of social determinants of divorce would decrease over time is not corroborated by the best empirical material so far available for the Netherlands. Apparently, the notion that Goode's diffusion theory can be generalized to other social determinants of divorce is not true. It is not the groups that are least likely to divorce that have increased their divorce risks the most (the religious, couples with children, and children from intact marriages). Divorce rates have increased, but differences between these social groups have remained intact. Goode's thesis was nevertheless correct, but it applies to education, not to other social determinants of divorce.

Notes

1. Note that the positive effect of wife's education was only observed when the educational levels of the two spouses were included simultaneously. This is usually not the case in other analyses.
2. We do not look at marriages formed in 2000 and later because these marriages had almost no time to divorce.

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References

- Blossfeld, H. P. and Muller, R. (2002). Union Disruption in Comparative Perspective: The Role of Assortative Partner Choice and Careers of Couples. *International Sociology*, 32, 3–35.
- Blossfeld, H.-P., De Rose, A., Hoem, J. M. and Rohwer, G. (1995). Education, Modernization, and the Risk of Marriage Disruption in Sweden, West Germany, and Italy. In Mason, K. O. and Jensen, A. M. (Eds), *Gender and Family Change in Industrialized Countries*. Oxford: Clarendon, pp. 200–222.
- Cherlin, A. J. (1979). Work Life and Marital Dissolution. In Levinger, G. and Moles, O. C. (Eds), *Divorce and Separation: Context, Causes and Consequences*. New York: Basic Books, pp. 151–166.
- De Graaf, P. and Ganzeboom, H. B. G. (1993). Family background and educational attainment in the Netherlands for the 1891–1960 birth cohorts. In Shavit, Y. and Blossfeld, H.-P. (Eds), *Persistent Inequality: Changing Educational Attainment in Thirteen Countries*. Boulder: Westview Press, pp. 75–99.
- De Graaf, P. M. D. and Kalmijn, M. (2005). Divorce Motives in a Period of Rising Divorce: Evidence from a Dutch Life History Survey. *Journal of Family Issues*, 27, 483–505.
- Diekmann, A. and Engelhardt, H. (1999). The social inheritance of divorce: Effects of parent's family type in postwar Germany. *American Sociological Review*, 64, 783–793.
- Dronkers, J. (1997). Zoals de ouden zongen, piepen de jongen: Intergenerationele overdracht van de kans op scheiding in Nederland. *Mens en Maatschappij*, 72, 149–165.
- Dronkers, J. (2002). Bestaat er een samenhang tussen echtscheiding en intelligentie? *Mens en Maatschappij*, 77, 25–42.
- Dykstra, P. A., Kalmijn, M., Knijn, T. C. M., Komter, A. E., Liefbroer, A. C. and Mulder, C. H. (2004a). *Codebook of the Netherlands Kinship Panel Study, a Multi-actor, Multi-method Panel Study on Solidarity in Family Relationships, Wave 1*. The Hague: Netherlands Interdisciplinary Demographic Institute.
- Dykstra, P. A., Kalmijn, M., Knijn, T. C. M., Komter, A. E., Liefbroer, A. C. and Mulder, C. H. (2004b). *The Netherlands Kinship Panel Study, 2002–2003*. The Hague: Netherlands' Interdisciplinary Demographic Institute.
- Fischer, T. (2004). *Parental Divorce, Conflict, and Resources*. Amsterdam: Thesis.
- Fokkema, T. and Liefbroer, A. (1999). Brengt werken echtscheiding dichterbij? De invloed van economische

- onafhankelijkheid op de echtscheidingskans van vrouwen geboren in de periode 1903–1937. *Mens en Maatschappij*, 74, 62–81.
- Ganzeboom, H. B. G., De Graaf, P. M. and Treiman, D. J. (1992). A Standard International Socio-Economic Index of Occupational Status. *Social Science Research*, 21, 1–56.
- Gelissen, J. P. T. M. (2003). Cross-National Differences in Public Consent to Divorce: Effects of Cultural, Structural and Compositional Factors. In Arts, W., Halman, L. C. J. M. and Hagenaars, J. A. P. (Eds), *The Cultural Diversity of European Unity: Findings, Explanations and Reflections from the European Values Study*. Leiden: Brill Academic Publishers, pp. 339–370.
- Goode, W. J. (1951). Economic Factors and Marital Stability. *American Sociological Review*, 16, 802–812.
- Goode, W. J. (1962). Marital Satisfaction and Instability: A Cross-Cultural Class Analysis of Divorce Rates. *International Social Science Journal*, 14, 507–526.
- Goode, W. J. (1993). *World Changes in Divorce Patterns*. New Have, CT: Yale University Press.
- Herrnstein, R. J. and Murray, C. (1994). *The Bell Curve: Intelligence and Class Structure in American life*. New York: Free Press.
- Hoem, J. M. (1997). Educational Gradients in Divorce Risks in Sweden in Recent Decades. *Population Studies*, 51, 19–28.
- Jalovaara, M. (2003). The Joint Effects of Marriage Partners' Socioeconomic Positions on the Risk of Divorce. *Demography*, 40, 67–81.
- Jonsson, J. O. and Gähler, M. (1997). Family Dissolution, Family Reconstitution, and Children's Educational Careers: Recent Evidence for Sweden. *Demography*, 34, 277–293.
- Kalmijn, M. (2003). Union Disruption in the Netherlands: Opposing Influences of Task Specialization and Assortive Mating? *International Journal of Sociology*, 33, 36–64.
- Kalmijn, M., De Graaf, P. M. and Janssen, J. P. G. (2005). The Effect of Inter-marriage with Respect to Religion and National Origins on the Risk of Divorce: Evidence from Vital Statistics in the Netherlands. *Population Studies*, 59, 71–85.
- Kalmijn, M., De Graaf, P. M. and Poortman, A. R. (2004). Interactions Between Cultural and Economic Determinants of Divorce in The Netherlands. *Journal of Marriage and Family*, 66, 75–89.
- Lesthaeghe, R. and Meekers, D. (1986). Value Changes and the Dimensions of Familialism in the European Community. *European Journal of Population*, 2, 225–268.
- Manting, D. (1994). *Dynamics in Marriage and Cohabitation: An Inter-temporal, Life Course Analysis of First Union Formation and Dissolution*. Amsterdam: Thesis Publishers.
- McLanahan, S. (2004). Diverging Destinies: How Children are Fading Under the Second Demographic Transition. *Demography*, 41, 607–628.
- McLanahan, S. and Sandefur, G. (1994). *Growing Up with a Single Parent: What Hurts, What Helps*. Cambridge: Harvard University Press.
- Oppenheimer, V. K. (2003). Cohabiting and Marriage during Young Men's Career-Development Process. *Demography*, 40, 127–149.
- Poortman, A. R. (2002). *Socioeconomic causes and consequences of divorce*. Amsterdam: Thesis.
- Poortman, A. R. and Kalmijn, M. (2002). Women's Labour Market Position and Divorce in the Netherlands: Evaluating Economic Interpretations of the Work Effect. *European Journal of Population*, 18, 175–202.
- South, S. J. (2001). Time-Dependent Effects of Wives' Employment on Marital Dissolution. *American Sociological Review*, 66, 226–245.
- Statistics Netherlands. (1999). *Vital Events: Past, Present, and Future of the Dutch Population* (Vol. Staatsuitgeverij): Voorburg.
- Stolzenberg, R. M., Blair-Loy, M. and Waite, L. J. (1995). Religious Participation in Early Adulthood: Age and Family Life Cycle Effects on Church Membership. *American Sociological Review*, 60, 84–103.
- Teachman, J. D. (2002). Stability Across Cohorts in Divorce Risk Factors. *Demography*, 39, 331–352.
- Thornton, A. and L. Young-DeMarco. (2001). Four Decades of Trends in Attitudes Toward Family Issues in the United States. *Journal of Marriage and the Family*, 63, 1009–1037.
- Voydanoff, P. (1990). Economic Distress and Family Relations: A Review of the Eighties. *Journal of Marriage and the Family*, 52, 1099–1115.
- Wolfinger, N. H. (1999). Trends in the Intergenerational Transmission of Divorce. *Demography*, 36, 415–420.
- Zegers, G. H. L., De Hart, J. and Peters, J. (1997). *God in Nederland*. Amsterdam: Anthos.

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