

The Family Factor in Jewish-Gentile Inter-marriage: A Sibling Analysis of The Netherlands

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Abstract

The tendency of members of many ethno-religious groups to marry within their group has been considered evidence for the persistent role of ascription in modern society. What is the role of the family of origin in this process? To answer this question, we study the marriage choices of Jews in the Netherlands, using a unique dataset and a novel analytical approach (i.e., multilevel analyses of sibling-data). Our models show that almost a third of the variation in Jewish endogamy can be attributed to a common family factor. Measured indicators of family background point to two underlying mechanisms: the intergenerational transmission of ethnic identities and the intergenerational provision of endogamous meeting and mating opportunities. Together, these mechanisms explain 75 percent of the total family influence.

The degree to which members of ethnic and religious groups marry within rather than outside their group is often viewed as an indicator of the strength of ascription in society. Studies on marriage choice have shown that most forms of ethnic and religious intermarriage have become more common over time (Kalmijn 1991; Lieberman and Waters 1988), in line with the frequently made claim that the importance of ascription in society has declined (Blau and Duncan 1967). It has also been recognized, however, that this transition is far from complete. Ethno-religious boundaries in society may have become weaker, but they have certainly not disappeared. Most of the interest of marriage researchers has focused on new immigrant groups and their descendants, groups that have increased in size and that have become increasingly important in debates about integration and multiculturalism. Older ethno-religious groups, groups that are less visible, and groups that have declined in size have received comparatively little attention. This is particularly true for the position of Jewish persons in Europe.

We re-examine the role of ascription in contemporary society by analyzing the marriage choices of Jews in the Netherlands after the Second World War. Using a unique data set and a novel analytical approach – multilevel analyses of siblings – we examine to what extent family background plays a role in explaining Jewish endogamy. Although it is often assumed that ethno-religious endogamy is an indicator of ascription, the degree to which this is true depends on how important the family of origin is in this respect. In other words, if choices are largely made within the group and the family factor is important, ethnicity is largely ascribed. If choices are endogamous but the parents play no role, choices are more individual in nature and ethnicity becomes ‘achieved’ rather than ‘ascribed.’ Under the assumption that one’s ethnic background is not visible in day-to-day encounters, people may choose their ethnic identity out of the ethnic options they have (Waters 1990). We argue that the importance of ascription in society should not only be assessed by measuring ethno-religious marriage boundaries, but also by assessing the extent to which ethno-religious endogamy is dependent on family background influences.

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There are two ways in which family background will foster endogamy: through the intergenerational transmission of *preferences* and through the intergenerational provision of *opportunities* (Kalmijn 1998; Lieberson and Waters 1988). The first mechanism suggests that the more strongly parents are orientated toward their ethno-religious identity, the greater the chances that their children will marry endogamously. The underlying reasoning is that children from families that stress their ethno-religious roots will attach more importance to their own ethno-religious identity, and that this translates into a strong preference for a spouse in one's own group. In addition, if the children have not adopted the preferences of their parents and want to marry outside the group, they may receive sanctions from their parents that will discourage them from pursuing the particular marriage candidate.

The second mechanism suggests that the more homogeneous the contexts in which the parents are embedded, the higher the chances that their children will marry endogamously. Parents are often engaged in contexts that provide opportunities for their children to marry endogamously. Important examples are friendship networks, churches and other ethno-religious organizations, schools and geographic areas such as cities and neighborhoods. Such settings are typically not intended as a meeting place for marriage partners, but they may promote ethno-religious endogamy as a by-product by providing a homogeneous pool of candidates to choose from. Such contexts are particularly important for groups that are very small in a society because the costs of finding someone within the group rise tremendously with declining relative size.

Exposure to homogeneous contexts may be associated with endogamy for two reasons. There may be a direct effect because involvement in such contexts affects the marriage choices of the children by changing the pool of eligibles from which they can choose. The effect may also be spurious, however, because engagement in homogeneous contexts may in turn be caused by a sense of ethno-religious identity and by norms of endogamy. If the effect is spurious, we should find that the effect of involvement in contexts disappears after taking into account indicators of ethno-religious identity. If involvement in contexts is a matter of opportunity, we should find that the influence of contexts remains significant after taking into account attachments to ethno-religious identities. In a similar way, it can be argued that parental attachment to ethnic identities may have a direct and an indirect effect on the marriage choices of their children. Such attachments may have direct effects through the socialization of ethnic norms, but they may also have indirect effects because they translate into greater opportunities for marrying inside the group.

Earlier studies of intermarriage among Jews in Europe and the United States have mostly been descriptive, showing that there is a significant marriage boundary between Jews and Gentiles. This has been shown for the prewar period in the Netherlands (Ultee and Luijkx 1998), for the postwar period in the Netherlands (Van Praag 1971), for France (Bensimon and Della Pergola 1986), for Britain (Miller, Schmol and Lerman 1996), and for the United States (Lazerwitz 1995; Chiswick 1997; Goldstein 1992). Intermarriage has also been found to increase across cohorts (Lazerwitz 1995). Much less is known, however, about the causes of endogamy. An exception is Waite and Friedman (1997), who use logistic regression analyses of Jewish endogamy in the United States to assess family influences. Waite and Friedman showed that people raised in a reform religious household are more likely to intermarry than people raised in a conservative or orthodox household. Mixed evidence was obtained for the role of religious rituals (Bar Mitzvah) and for attending Jewish schools.

Our analyses expands this line of research by analyzing a new country and, more importantly, by applying a sibling design. In our survey, information was collected on all the siblings of the respondent. Because siblings share their parents and the circumstances under which they are brought up, sibling similarities in adult marriage choices reflect the influence of family background (*cf.*, Kuo and Hauser 1995). We estimate multilevel models on the marriage choices of multiple siblings; this allows us to decompose the total variance in marriage choices into an individual- and a family-level component. This makes it possible to estimate the *total* influence of

family background without including direct indicators of family background. Subsequently, we use measured indicators of the family of origin to assess how much each of the identified alternative family background mechanisms account for the total family influence.

Before turning to the data, some information on the situation of Jews in the Netherlands is in order (Van Solinge and De Vries 2001; Moore 1997). Compared to other countries that suffered from the Nazi occupation, the destructive impact of the Holocaust on the Jewish population has been particularly strong in the Netherlands. In the direct postwar years, there was a pronounced drive towards emigration among Dutch Jews, in particular to Israel and the United States. However, in later years many of these emigrants returned to the Netherlands. As in other countries, Jews in the Netherlands are concentrated in the larger cities and particularly in Amsterdam. A minority of Jews is formally affiliated to Jewish congregations, and this proportion remained more or less stable after the 1980s. Jews tend to form a socio-cultural elite in the sense that they are highly educated and occupy high-status occupations. As far as demographic behavior is concerned, marriage tends to occur late, cohabitation is common, and divorce frequent.

Data

Acquiring a representative sample of Jews in the Netherlands is a major challenge. The very small proportion of the Dutch population made up by Jews makes it unfeasible to start from a random sample of the population. To solve this problem, we followed the method of sampling Jewish names which was used in other countries (Bensimon and Della Pergola 1986; Miller, Schmool and Lerman 1996). The first stage of our survey involved a random selection of distinctive Jewish names (DJNs) from the Amsterdam phone register by three panels of experts. A name was added to the list of DJNs if it was listed by at least two of the three panels. The result was a sample of 453 DJNs. The Dutch telephone company then provided names and addresses for all telephone numbers linked to these 453 names in the entire country. Subsequently, a random sample was drawn of these addresses. Samples were drawn within regions in order to ensure a correct regional distribution of the Jewish sample. The final stage involved a screening by telephone. Persons who had at least one Jewish parent were asked to participate. This resulted in a total of 781 people who took part in the survey. In addition, 88 Jewish partners were interviewed. The response rate was 54 percent. Since the sampling procedure could not be expected to reach intermarried Jewish women who use their husband's name rather than their own name, a snowball sample of 167 such persons was added to the random sample.

Considerable effort has been put into examining the representativeness of the realized sample. It has been compared to the population on five key aspects (age, sex, region, marital status and number of Jewish parents). The reference population was constructed using estimation procedures based on a variety of vital statistics and other data sources (Van Solinge and De Vries 2001). The only emerging difference was that too many single Jewish women and too few Jews with a non-Jewish father were interviewed. Both differences stem from the use of names to identify Jewish persons (i.e., single women are more likely to have an entry in the telephone register than partnered women and Jews with a non-Jewish father usually have a non-Jewish name). Weights were used to adjust the realized sample to this reference population.

We use information about the current partner relationships of both our primary respondents and all their living siblings. This analysis is based on *current* partners of respondents and siblings because questions about the sibling's former partners were not asked. Current partners include partners with whom the respondent or sibling does not live. To avoid complications arising from stepfamily formation, we only included siblings who were born to the same parents as the respondents, and therefore, presumably, were raised in the same family circumstances as the respondent. The total number of selected families is 849

and the total number of respondents and siblings combined is 1,725 (with an average of two siblings per family).

Measures

The dependent variable is endogamy (inmarriage). We compare Jews who currently have a partner with at least one Jewish parent to Jews who have a partner with no Jewish parents. We do not differentiate among Jewish partners with different types and numbers of Jewish parents.

The independent variables are measures of family background. We first consider a set of indicators of the intergenerational transmission of *identities*:

Mixed Parental Marriage

Three groups are distinguished: both parents are/were Jewish, only the father is Jewish, and only the mother is Jewish. The first group serves as the reference category.

Religious Orthodoxy

Information on the level of orthodoxy in the parental home is obtained from two questions on the way the respondent was brought up. Respondents had to rate two topics (religion and holidays/customs) on a three-point scale ranging from "not Jewish" to "very Jewish." The two items correlate highly (.76). A scale score was calculated by taking the mean of the scores on the two items.

Parental Divorce and Non-Jewish Stepparent

It can be assumed that ethnic identities in the parental home are weaker when children were brought up with a non-Jewish stepparent. We include a dummy variable indicating this, as well as a control variable indicating whether the parents were divorced.

We subsequently include family background measures that are related to the intergenerational provision of *meeting opportunities*. It should be noted at the outset, however, that such measures are always a combination of preferences and opportunities. Nonetheless, these measures are more strongly related to opportunities than the measures just discussed.

Parental Networks

In the series of questions about how the respondent was brought up, respondents also had to rate the friends and acquaintances of their parents (on a three-point scale ranging from "not Jewish" to "very Jewish").

Religious Organization Member

Respondents reported on whether their parents were members of a Jewish religious community when the respondent attended elementary school.

Jewish Education

We do not have sibling-specific data on Jewish education, but we assume that siblings will mostly have attended the same or similar schools. The variable indicates whether the respondent ever attended a Jewish day school or attended Jewish religious lessons.

Proportion of Jews in Place of Birth

To measure structural opportunities in geographic terms, we included the proportion of Jews in the place of birth of the respondent, using external data (Van Praag 1971). Since the distribution of the Jewish population across major regions is fairly stable across the post-war period, we do not use year-specific municipality data (Van Solinge and De Vries 2001). Jews who were born abroad were assigned the mean value on this variable and a dummy variable is included indicating whether a respondent was born abroad. Note that a nontrivial number of persons was born abroad (Table 1), but few of these entered the Netherlands with a spouse. In fact, most of them were young, unmarried or coming to the Netherlands to marry a Dutch spouse (Van Solinge and De Vries 2001).

Table 1: Means and Standard Deviations of Independent Variables (Weighted Sibling Sample)

	Mean	Standard Deviation
Identity		
Mother non-Jewish (dichotomous)	.31	
Father non-Jewish (dichotomous)	.24	
Parents religiously orthodox (1-3)	1.56	.67
Parents divorced (dichotomous)	.15	
Non-Jewish stepparent(s) (dichotomous)	.05	
Contexts and Identity		
Parents Jewish friends (1-3)	1.87	.75
Parents members religious community (dichotomous)	.36	
Gone to Jewish school or religious education (dichotomous) ^a	.36	
Percentage of Jews in place of birth ^a	.76	.78
Born abroad (dichotomous) ^a	.13	
Controls		
Woman (dichotomous)	.42	
Year of birth (-1900)	48	15
Cohabiting (dichotomous)	.15	
Non-resident partner (dichotomous)	.07	
Educational level parents (1-6)	4.00	1.64
Educational level parents missing (dichotomous)	.04	
Other		
Average number of siblings	2.03	
Number of cases	1725	

^a Refers to the respondent and not to his/her siblings.

All the measures we use apply to the family of origin of the respondent. By limiting the sample to siblings born to the same parents as the primary respondent, these measures also apply to the family of origin of the siblings. We should keep in mind, however, that in some cases, the reports reflect the perceptions of the respondent about what was happening in the family of origin and that such perceptions may differ among siblings.

We include the following control variables: union status, distinguished into married, cohabiting, or not living together (this information is available for all siblings), parental education (averaged across father and mother), birth cohort and sex. Age at marriage and education are only available for the respondent and not for the siblings. Analyses on primary respondents show that after controlling for the other variables listed above, no direct effects of age at marriage or education remain, so we feel safe in excluding these variables from the sibling models. Means and standard deviations are in Table 1.

Method

We start examining the role of family background by presenting a cross-tabulation of marriage choices of all sibling pairs in our dataset. This cross-tabulation provides a straightforward way to get a first impression of how much siblings resemble each other in terms of their marriage choices. Next, we present results from a series of multilevel models of marriage choices of all siblings in our dataset. In the literature, sibling data are often analyzed through covariance models (Kuo and Hauser 1995), but recently multilevel or random-effects models have become popular as well (Curtis, Diamond and McDonald 1993; Van Poppel, Schellekens and Liefbroer 2002). In our view, there are no compelling reasons for favoring either one method.

In multilevel models, differences among families and differences among individuals are estimated simultaneously (Goldstein 1995). The model provides a way to assess how much of the total variation in marriage choices is attributable to the common family environment shared by siblings and how much is attributable to factors unique to the individual. The model also allows for a correct estimation of the effects of measured family variables and enables us to assess to what extent variation among families is explained by these measured characteristics. Because the dependent variable is dichotomous rather than continuous, a logistic regression model is estimated. To estimate this model for multilevel data, we use a technique proposed by Goldstein (1995), i.e., restrictive iterative generalized least squares.

To assess the role of alternative interpretations of family background effects, we estimate a series of models. The first model contains an intercept only. This model allows us to estimate the proportion of the total variance that is attributable to the family rather than to the individual. Next, we estimate a model containing variables linked to the intergenerational transmission of preferences and a model containing variables linked to the intergenerational provision of opportunities. In the fourth model, both types of variables are included to assess their relative importance. In a fifth model, finally, the control variables are added.

A convenient measure to summarize the importance of the family factor is the so-called 'variance partition coefficient' (VPC) (Goldstein 1995). This coefficient gives the proportion of the total variance attributable to the shared family environment. However, a complicating factor in assessing the VPC in our models is that we estimate a logistic regression model. In such a model, the individual level variance and the family level variance cannot be easily compared to one another, because the first depends on the expected value of the dependent variable and the second is measured on a logistic scale. Fortunately, Goldstein, Browne and Rasbash (2002) have developed a method to estimate VPC in such models, by applying what they call a method of 'model linearization.' We use this method to calculate the VPC for our model.

Results

We start with some descriptives, using a sample of all first marriages or cohabiting relationships (Table 2). We observe that on average, 54 percent of all first marriages and 58 percent of all first (married and unmarried) cohabitational unions are exogamous. This percentage fluctuates across union cohorts, but there is no clear trend. Overall, women are somewhat more likely to marry a partner with a Jewish background than men, but this difference has decreased among more recent union cohorts. Because we do not have data on the non-Jewish population, odds ratios can only be calculated when additional assumptions are made. Assuming that there are equal numbers of Jewish men and women, that the marriage behavior of Jewish men and women is the same (taking the overall percentage as the starting point), and that the married Jewish population is about .3 percent of the total married population, the (log) odds ratio would be 6.2. Compared to other ethnic and religious groups in Europe and the United States, this can be interpreted as indicating high levels of endogamy (Alba and Golden 1986; Lieberson and Waters 1988).

Table 2: Percentage of Jews Whose First Cohabitation and Whose First Marriage Was With a Non-Jewish Spouse, By Union Cohort and Marriage Cohort, Respectively (Weighted Individual Sample)

Union / Marriage Cohort	First cohabitation				First marriage			
	Men	Women	Total	N	Men	Women	Total	N
Before 1946	59	36	44	48	59	31	41	46
1946-1959	68	55	59	179	69	56	60	176
1960-1969	58	47	52	186	56	38	47	157
1970-1979	69	53	62	174	63	46	55	129
1980-1989	59	63	61	124	65	57	61	83
1990-1999	67	61	64	112	54	52	53	100
Total	64	53	58	823	61	48	54	691

To get a first impression of the overall importance of the family of origin, one may cross-tabulate partner choices of sibling pairs. We look at all pairs of siblings within a family, including pairs containing the respondent. The focus here (and in the regression models) is on current relationships, not on first relationships. It turns out that among persons who have a Jewish partner, the chance is 71 percent that the (younger) brother or sister also has a Jewish partner. If someone does not have a Jewish partner, the chances are only 20 percent that his or her sibling has a Jewish partner. The differential between these two chances is the odds ratio and this ratio is 3.6 and statistically significant. In other words, siblings are very much alike in the type of spouse they choose.

The results of the multilevel regression models are in Table 3. Model 1 is an empty model which allows us to assess the overall family influence. Following Goldstein, Browne and Rasbach (2002), we calculate the variance partition coefficient (VPC) as follows: $VPC = \frac{[\sigma_U^2 \pi^2]}{[1 + \exp(\beta_0 + \beta_1 x)]^2 \{[\sigma_U^2 \pi^2] [1 + \exp(\beta_0 + \beta_1 x)]^2 + \pi (1 - \pi)\}^{-1}}$ where σ_U^2 is the family variance and π is the expected mean in the model under consideration, i.e., $\pi = \frac{\exp(\beta_0 + \beta_1 x)}{[1 + \exp(\beta_0 + \beta_1 x)]}$. To calculate the proportion of unexplained variance at the family level, we start from Model 1 in Table 3. This is an empty model containing an intercept only. In this model, $\sigma_U^2 = 2.22$, $\exp(\beta_0) = e^{-.91} = .403$ and $\pi = \frac{e^{-.91}}{(1 + e^{-.91})} = .287$. Substituting these values in the formula for the VPC gives a VPC of .312. This implies that almost a third of the

Table 3: Logistic Regression Effects of Selected Multilevel Models of Endogamous Marriage Among Jews (Weighted RIGLS with 2nd Order PQL)

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	b	s.e. b	b	s.e. b	b	s.e. b	b	s.e. b	b	s.e. b
Intercept	-.91**	.10	-1.76**	.27	-3.06**	.25	-2.10**	.31	-2.24**	.45
Identity										
Mother non-Jewish (vs. both Jewish)			-1.98**	.26			-1.59**	.27	-1.65**	.27
Father non-Jewish (vs. both Jewish)			-1.45**	.25			-1.11**	.26	-1.20**	.28
Parents religiously orthodox			1.09**	.13			.70**	.18	.67**	.19
Parents divorced			-.28	.27			-.35	.26	-.24	.27
Non-Jewish stepparent(s)			.20	.57			.25	.56	.22	.57
Contexts and Identity										
Parents members religious community					.53*	.23	-.01	.22	.07	.24
Parents Jewish friends					.53**	.13	.12	.15	.11	.16
Gone to Jewish school or religious education					1.56**	.22	.71**	.23	.72**	.24
Proportion of Jews in place of birth					.22	.12	.24	.12	.23	.12
Born abroad					.93**	.25	.90**	.24	.84**	.26
Controls										
Woman (vs. man)									.74**	.16
Year of birth									.00	.01
Cohabiting (vs. married)									-1.13**	.29
Non-resident partner (vs. married)									-.73**	.29
Educational level parents									-.01	.06
Educational level parents missing									.09	.38
Family variance									.71**	.17
	2.22**	.20	.71**	.18	.90**	.19	.55**	.16		

** p < .01 * p < .05 ~ p < .10.

variation in marriage choices is due to family differences. In line with what the odds ratios for sibling associations told us, this figure shows that family background is an important factor in understanding intermarriage choices of Dutch Jews.

We now turn to the measured family background variables in Model 2, 3 and 4. Model 2 contains 'parental identity' variables, Model 3 contains variables that are a mix of 'parental context' and 'parental identity' characteristics, and Model 4 contains both these sets. By comparing the effects of identity variables between Model 2 and Model 4, we get information about whether the effects of attachments to ethno-religious identities are indirect, through parental contexts. By comparing effects of Model 3 and Model 4, we obtain evidence about the degree to which effects of context variables are spurious. If exposure to ethnically homogeneous contexts is merely a reflection of attachment to ethno-religious identities and such contexts do not by themselves foster endogamy, the effects observed in Model 3 should become smaller in Model 4.

The regression results of Model 2 show that children of mixed marriages are much less likely to marry within the group than children with two Jewish parents. The effects are substantial in size, but depend on whether the father or mother is non-Jewish. Having a non-Jewish mother reduces the odds of endogamous marriage more strongly than having a non-Jewish father. In other words, the children of mixed marriages intermarry more often, and this is even more so when only the father is Jewish and the respondent is consequently not considered as Jewish if the Halachic definition is applied. This is in line with our expectations, but we note that the effect of having a non-Jewish father is still statistically significant. Hence, it is not just the formal definition of a Jewish identity that matters, it is also the social identity that counts. These effects are reduced somewhat when including other variables in the model (models 4 and 5), suggesting that the effects are partly indirect. The effects remain highly significant, however, showing that there is also a direct effect. We interpret this as evidence that there is direct transmission of endogamy across generations.

Religious orthodoxy, as measured by adherence to Jewish religious customs and holidays in the parental home, also has a strong effect on endogamy. In families where religion plays an important role, the children are much less likely to marry outside their group. This effect remains significant in the multivariate models, when context variables are included. We do observe, however, that the effect of parental orthodoxy is reduced by about one third when including other variables in the model. The two final indicators for religious identity, parental divorce and having non-Jewish stepparents did not prove to be statistically significant.

Variables that reflect an attachment to Jewish identity as well as an involvement in social settings that may foster endogamy are included in Model 3. The first indicator has a strong effect: when parents are a member of a religious community, the children are more likely to marry endogamously. This effect becomes insignificant, however, after we take into account identity variables. We therefore must conclude that the effect of religious membership is spurious: it is due to the intergenerational transmission of the Jewish identity and not to the homogeneous Jewish contexts in which the children are embedded.

For the parental network, we find significant effects as well. When parents had more Jewish friends and acquaintances when the children were growing up, the children are more likely to marry endogamously. The effect becomes insignificant, however, when identity variables are added. In other words, homogeneous parental friendship networks are primarily a reflection of a stronger Jewish identity, they do not encourage endogamous marriages of the children directly by providing a more selective pool of people to choose from.

A different pattern is observed for Jewish schools. When parents send their children to a Jewish school, the chances are significantly higher that the children will end up with a Jewish spouse. When controlling for Jewish identity variables, the effect is halved, but it remains

statistically significant. In other words, people who went to a Jewish school when they were young are more likely to marry endogamously than other Jewish persons, even if we take into account that they are more strongly socialized into an ethno-religious identity than persons who did not attend a Jewish school. This result favors the hypothesis about meeting and mating opportunities.

The place of birth also turns out to play a role. People who were born in localities where the proportion of Jews is higher, are more likely to marry endogamously. The effect remains marginally significant and does not change in magnitude after all other variables are controlled for. This is another piece of evidence favoring the role of opportunity in intermarriage.

We end by discussing the effects of individual characteristics. We observe much higher chances of an endogamous relationship when the couple is married rather than cohabiting. We also observe lower levels of endogamy when the couple is not living together, but the couples who cohabit differ more strongly from the married than couples who are just living apart. We also observe that when all variables are included in the model, women are more likely to marry within the group than men. This may be due to stronger endogamy norms for women. Finally, we find no effect of birth cohort and no effect of the educational level of the parents.

The various models have added measured family background variables to the model. The first and empty model showed that 31 percent of the total variance could be attributed to family factors. To what extent are the measured family background characteristics able to explain the variance among families? We can answer this question by comparing the family variance in the various models. Model 2 which only contains family identity variables reduces the family variation by 68 percent. The model which contains mixed context and identity variables explains 59 percent of the family-level variation. The model containing both sets explains 75 percent of the family variance. In other words, about three quarters of the total family effect on intermarriage is picked up by our measured family characteristics. This is a substantial amount, showing that we succeeded quite well in measuring the ways in which parents influence the marriage choices of their children.

Note that the estimate for the family variance in Model 5 is higher than that for Model 4. This may seem puzzling at first sight, but it results from the introduction of individual level variables in Model 5. These will lead to a reduction in the individual level variance. As a result, the relative amount of unexplained variation at the family level will rise, causing a possible increase in the absolute size of the family variation in its wake. However, because we introduced only family level variables between Model 1 and Model 4 a comparison of family variance estimates between these models was unproblematic.

The results presented in Table 3 are based on a rather complex sampling design, including weighting, snowball sampling, and the inclusion of multiple household members. As a result, one may wonder how robust these results are. In order to gain insight into this question, we replicated the full model on an unweighted sample, a sample without snowball cases, a sample without father-Jews, and a sample without household members (results available on request). The conclusion from these sensitivity analyses is that they enhance our confidence in the results. For most alternative specifications, the results strongly resemble those from our weighted full sample. If results differ, the differences seem to point to biases introduced by using a selective sub-sample rather than to biases in our full sample.

Conclusion

Our analysis has shown in a novel and more convincing way than has been done before that the family of origin plays a crucial role in fostering ethnic endogamy. By analyzing the similarity

of siblings, we can for the first time assess the total influence of the family of origin on marriage choices along lines of ascription. Our results show that about a third of the variation in these choices is attributable to the family of origin. The figure can be compared to figures obtained in stratification research. Sibling analyses of educational attainment in the United States, for example, show that about half the variance in educational attainment can be attributed to family background (Kuo and Hauser 1995). Our analyses suggest that family background is less important for intermarriage than it is for stratification outcomes.

We subsequently examined two sociological mechanisms that may account for this variation: the mechanism of intergenerational transmission of preferences and the mechanism of the intergenerational provision of opportunities. Indeed, our measures of these two mechanisms were able to account for three quarters of the family variation in marriage choices. This is a sizeable proportion, suggesting that these mechanisms are indeed influential. The mechanism of the intergenerational transmission of preferences turned out to be by far the most important of the two, once again suggesting that a socialization that puts an emphasis on the importance of one's ethno-religious identity leaves a strong mark on its recipients.

The results also lead to a more general conclusion. In the past, ethnic and religious endogamy has often been considered as evidence for the importance of ascription in society. Similarly, that most forms of ethnic and religious intermarriage have increased, has been regarded as evidence for a decline in the importance of ascription. There have been exceptions to this general pattern, however, and we present the case of Jews in postwar Holland as another exception. The level of Jewish endogamy is high and has not declined over time, suggesting that ascribed group boundaries can still be important in modern society.

Ethnic intermarriage is not necessarily evidence of ascription, however, because people may also choose their ethnic and religious identities. If people marry within the ethnic group because they themselves have chosen that as an important personal identity, endogamy may also be regarded as 'achieved' rather than 'ascribed' (Waters 1990). To obtain a stronger case for the role of ascription, it is therefore important to assess the influence of the family of origin on the type of marriage choices that people make. This paper has done that and has shown that about a third of the variance in ethnic endogamy is due to family background. In other words, we have double evidence on the importance of ascription: The marriage choices of Jews and Gentiles are often made within the ethnic group and these choices are to a large part governed by the family of origin.

References

- Alba, Richard D., and Reid M. Golden. 1986. "Patterns of Ethnic Marriage in the United States." *Social Forces* 65:202-223.
- Bensimon, Doris, and Sergio Della Pergola. 1986. *La population juive de France: Socio-démographie et identité*. Paris: The Institute of Contemporary Jewry, Hebrew University of Jerusalem / Centre National de la Recherche Scientifique.
- Blau, Peter M., and Otis D. Duncan. 1967. *The American Occupational Structure*. Wiley & Sons.
- Chiswick, Carmel U. 1997. "Determinants of Religious Intermarriage: Are Jews Really Different?" Pp. 247-257. *Papers in Jewish Demography 1993*. S. Della Pergola, editor. Jerusalem: The Hebrew University.
- Curtis, Sian L., Ian Diamond and John W. McDonald. 1993. "Birth Interval and Family Effects on Postneonatal Mortality in Brazil." *Demography* 30:33-43.

- Goldstein, Harvey. 1995. *Multilevel Statistical Models. Second Edition*. Arnold.
- Goldstein, Harvey, William Browne and Jon Rasbash. 2002. "Partitioning Variation in Multilevel Models." *Understanding Statistics* 1:223-232.
- Goldstein, Sidney. 1992. "Profile of American Jewry: Insights From the 1990 National Jewish Population Survey." *American Jewish Year Book* 92:77-173.
- Kalmijn, Matthijs. 1991. "Trends in Religious and Educational Homogamy." *American Sociological Review* 56:786-800.
- _____. 1998. "Intermarriage and Homogamy: Causes, Patterns, Trends." *Annual Review of Sociology* 24:395-421.
- Kuo, Hsiang-Hui, and Robert M. Hauser. 1995. "Trends in Family Effects on the Education of Black and White Brothers." *Sociology of Education* 68:136-160.
- Lazerwitz, Bernard. 1995. "Jewish-Christian Marriages and Conversions, 1971 and 1990." *Sociology of Religion* 56:433-43.
- Lieberson, Stanley, and Mary Waters. 1988. *From Many Strands: Ethnic and Racial Groups in Contemporary America*. Russell Sage Foundation.
- Miller, Stephan, Marlana Schmool and Antony Lerman. 1996. *Social and Political Attitudes of British Jews: Some Key Findings of the JPR Survey*. London: Institute for Jewish Policy Research.
- Moore, Bob. 1997. *Victims and Survivors: The Nazi Persecution of the Jews in the Netherlands 1940-1945*. Arnold.
- Ultee, Wout, and Ruud Luijkx. 1998. "Jewish-Gentile Intermarriage in Six European Cities 1900-1940: Explaining Differences and Trends." *Netherlands' Journal of Social Sciences* 34: 165-195.
- Van Poppel, Frans, Jona Schellekens and Aart C. Liefbroer. 2002. "Religious Differentials in Infant and Child Mortality in Holland, 1855-1912." *Population Studies* 56:277-289.
- Van Praag, Philip. 1971. *Demografie van de Joden in Nederland*. Assen: Van Gorcum. The Hague: NIDI publication 1.
- Van Solinge, Hanna, and Marlene de Vries, editors. 2001. *De Joden in Nederland anno 2000. Demografisch profiel en binding aan het jodendom*. Amsterdam: Aksant.
- Waite, Linda, and Judith Steps Friedman. 1997. "The Impact of Religious Upbringing and Marriage Markets on Jewish Intermarriage." *Contemporary Jewry* 18:1-23.
- Waters, Mary. 1990. *Ethnic Options: Choosing Identities in America*. University of California Press.