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Assortative Mating Among Dutch Married and Cohabiting Same-Sex and Different-Sex Couples

The authors compared male and female same-sex and different-sex couples in the Netherlands with respect to age and educational homogamy. Because many same-sex couples in the Netherlands are married, differences between married and cohabiting couples were analyzed for all 3 groups. Analyses of data from the Dutch Labor Force Surveys 2001–2007 (N = 184,999 couples) showed that male same-sex couples are less homogamous in terms of age and education than different-sex couples. Female same-sex couples are less homogamous in terms of age, but not in terms of education. No meaningful differences were found between married couples and cohabiting couples. Partnership status appeared less important than the sex composition of the couple. Given the relatively tolerant climate toward homosexuals in the Netherlands, the similarity of the results with those yielded by studies conducted in the United States may be considered striking.

In this study, we used large-scale random samples to describe patterns in mate selection of male and female same-sex couples in

comparison to different-sex couples, distinguishing between married and cohabiting couples. The study of same-sex couples is part of a growing interest in the diversity and acceptance of nonstandard family types, which have marked the process of family change over the past decades (Rosenfeld & Kim, 2005). For the Netherlands, no previous study on assortative mating among same-sex couples is available, although the Netherlands is a unique case for studying same-sex relationships because it was the first country to introduce legalized same-sex marriages in 2001. As a result, this study can go one step further than the few previous studies on assortative mating among same-sex couples and distinguish between married and cohabiting male same-sex, female same-sex, and different-sex couples. Besides offering new descriptive findings on union types that are rarely studied in the literature, this study also contributes to the literature in a theoretical way. Existing theoretical ideas about assortative mating are implicitly or explicitly directed at male–female couples. We systematically put together these existing theories and applied them to same-sex partnerships as well as to married versus cohabiting partnerships. Empirically, we were not able to separate the theoretical arguments, but our analyses will make clear whether the commonly supposed marriage–cohabitation distinction in assortative mating patterns is as relevant in same-sex couples as in different-sex couples and whether the distinction by partnership status is as important as the distinction by sexual orientation. We examined assortative mating with respect to education and age.

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Research on assortative mating in same-sex couples is scarce, the main cause being a lack of appropriate data. One of the most prominent studies on the United States was conducted by Jepsen and Jepsen (2002), who analyzed the American 1990 U.S. Census data with logit models. More recently, Schwartz and Graf (2009) extended this research by studying the 1990 and 2000 U.S. Census. Both with respect to age and education, male same-sex partners were generally found to be least similar, whereas married different-sex partners were most similar. Female same-sex couples and cohabiting different-sex partners had intermediate positions. In some studies, cohabiting couples appear to be closest to married couples, creating a dividing line between same-sex and different-sex couples; in other studies, cohabiting couples appear to be more similar to female (and male) same-sex couples. In Europe, Andersson, Noack, Seierstad, and Weedon-Fekjær (2006) used register data for Sweden and Norway to describe the demographics of male and female same-sex couples, including a comparison with different-sex couples for Sweden only. They showed that female same-sex couples were more homogamous with respect to education and age than male same-sex couples in both countries, and that, in Sweden, male same-sex couples were less homogamous in age and education than different-sex couples, whereas female same-sex couples were less similar in age but slightly more similar in education than different-sex couples.

As mentioned, the Netherlands offers a unique case because of the opportunity it provides to distinguish married and cohabiting same-sex couples. A few other countries introduced partnership forms that give same-sex couples legal rights that are comparable to those of married different-sex couples as early as or earlier than the Netherlands, for example, Denmark in 1989 (Boele-Woelki & Fuchs, 2003). However, same-sex marriage adds symbolic value and solves the disparity in legal rights that are still present in registered partnerships; the introduction of same-sex marriage was therefore perceived as an extra step in the gay emancipation process of obtaining equal civil rights (Hekma, 2004). More generally, the Netherlands is an interesting setting for the study on gay male and lesbian couples because of its high level of tolerance toward members of sexual minority groups

(Kelley, 2001). The *Atlas of European Values* shows that, already in 1981 and 1990, the Netherlands was the most permissive country in Europe in regard to homosexuality (Halman, Sieben, & Van Zundert, 2011). In 1999 and 2008, other European countries became more permissive as well, but the Netherlands was still among the most permissive countries. A tolerant context may affect the partner selection process of gay men and lesbian women: The pool of potential partners may be somewhat larger than in intolerant contexts, for example, because homosexuals are more likely to disclose their sexual orientation. More important, if social norms and acceptance in the social context are, in part, causing differences in mate selection, one would not expect large differences in the Netherlands between gay male and lesbian couples on the one hand and heterosexual couples on the other hand.

In this study, we analyzed the Dutch Labor Force Surveys from 2001 through 2007, using both descriptive techniques and log linear modeling to answer the research question regarding the extent to which educational and age homogamy differ between married and cohabiting male same-sex, female same-sex, and different-sex couples in the Netherlands. The Dutch Labor Force Surveys comprise a household-level data collection that has large random samples and guarantees sufficient numbers of same-sex couples with information on both partners and results that are representative of Dutch society. In line with the previously mentioned American studies, we will use the gender composition of the couple to define the type of couple.

HYPOTHESES

Age and Educational Homogamy by Sexual Orientation

We systematically put together four existing general theoretical ideas on assortative mating, commonly used to predict patterns among heterosexual couples, and add arguments explicitly directed at gay men and lesbians in order to predict differences in assortative mating patterns between couples with different sexual orientations. Next, we outline how the same four arguments are expected to predict differences in assortative mating between married and cohabiting couples.

A first important theoretical reason to expect homogamy concerns *meeting opportunities* (Kalmijn, 1998). This is the argument most frequently used in previous literature on differences in educational and age resemblance between couples with different sexual orientations (Kurdek & Schmitt, 1987; Noack, Seierstad, & Weedon-Fekjær, 2005; Rosenfeld & Kim, 2005; Schwartz & Graf, 2009; Solomon, Rothblum, & Balsam, 2005). The prevalence rates of gay men and lesbian women are considerably lower than those of heterosexual men and women, which narrows the pool of potential partners. If the absolute size of the marriage market is smaller, it will be more difficult to find someone who is similar to oneself (McFarland, 1975). In addition to this group size argument, one can argue that the local settings of the marriage market of homosexuals and heterosexuals differ. Because homosexuality is not universally accepted, gay men and lesbian women are less likely to find a mate in the conventional socially homogamous meeting places, such as schools and the workplace (Blumstein & Schwartz, 1983). Such meeting settings have been shown to be important causes of homogamy (Kalmijn & Flap, 2001). The marriage market of gay men and lesbians tends to center around urban areas, predominantly because urban settings are more tolerant of subcultures that are prohibited elsewhere (Black, Gates, Sanders, & Taylor, 2000; Fischer, 1995; Rosenfeld & Kim, 2005). Because urban settings have a more diverse population, meeting a partner with different socioeconomic or demographic characteristics becomes more likely (Rosenfeld & Kim, 2005; Schwartz & Graf, 2009). In sum, both marriage market arguments lead us to expect lower levels of educational and age homogamy among same-sex couples compared to different-sex couples.

A second mechanism presented in the literature that explains levels of partner similarity is *unconventionality*. The general argument is that transgression of social norms in one respect makes it more likely for one to transgress social norms in other respects as well (Rosenfeld & Kim, 2005; Schwartz & Graf, 2009). Matching can generally be considered the norm (Blackwell & Lichter, 2000). In addition, conventional partnerships consist of a man and a woman. Because same-sex couples deviate from the conventional pattern promoting a male–female relationship, they are expected to be more likely to deviate

from the conventional assortative mating pattern as well. The unconventionality argument thus results in the hypothesis that similarity in education and age is lower in same-sex couples than in different-sex couples.

The third mechanism involves *relationship commitment*. Relationships with low levels of commitment are assumed to be less serious relationships lacking a long-term time horizon and relation-specific investments (Kamp Dush & Amato, 2005; Oppenheimer, 1988). For such relationships, requirements in a potential partner can be less restrictive—implying lower levels of matching—than for highly committed relationships (Blackwell & Lichter, 2000, 2004; Oppenheimer, 1988; Schwartz, 2010). Gay male and lesbian relationships have been argued to have lower levels of commitment, on average, than heterosexual couples because same-sex couples are often childless and have higher dissolution risks than different-sex couples (Andersson et al., 2006; Kalmijn, Loeve, & Manting, 2007). We thus expect, again, lower levels of educational and age homogamy among same-sex couples compared to different-sex couples.

Fourth, we present a plausible argument for why same-sex couples would be more homogamous than different-sex couples: *egalitarian preferences*. Similarity of partners with respect to education and age facilitates an equal division of labor, whereas specialization is more efficient when there are differences between partners with respect to education and age. Both education and age are important determinants of earnings (Becker, 1981). As a result, similarity implies that neither partner has a relative advantage in the labor market over the other, making specialization less beneficial. Egalitarian preferences are claimed to be stronger among same-sex couples than among different-sex couples (Ciano-Boyce & Shelley-Sireci, 2002; Goldberg & Perry-Jenkins, 2007; Kalmijn et al., 2007; Sullivan, 1996). These egalitarian norms may be related to the liberal attitudes in general and to the higher educational levels usually observed among same-sex couples. They may also result from the simple fact that these couples consist of two persons of the same sex who have both been socialized with the same gender roles (Jaspers & Verbakel, 2013). In the partner selection process, similarity in education and age are arguably more important criteria for equality-minded couples. Consequently, the egalitarianism hypothesis argues that educational and age homogamy

will be higher among same-sex couples than among different-sex couples.

So far, we have not differentiated male from female same-sex couples. Application of the above-mentioned arguments to gay male and lesbian couples does not always result in a clear prediction about different levels of assortative mating between these couples. First, we do not expect major differences in meeting opportunities. Prevalence rates of gay men hardly deviate from those of lesbians: A slightly higher proportion of Dutch men identify themselves as homosexual compared to women (4% vs. 3%), but more women than men report sexual desire for someone of the same sex (18% vs. 13%; Kuyper, 2006). Second, whether the conventionality argument applies more strongly to gay male couples than to lesbian couples depends on whether male–male partnerships are more or less unconventional than female–female partnerships, and this cannot be determined a priori. Third, relationship commitment may, on the one hand, be argued to be stronger for female–female couples because they have children more often (Jaspers & Verbakel, 2013). On the other hand, commitment may be weaker for female–female couples because they have higher dissolution risks, at least in Norway and Sweden (Andersson et al., 2006). Finally, previous literature has suggested that lesbian couples have stronger egalitarian preferences than gay male couples (Blumstein & Schwartz, 1983); this leads to the expectation that assortative mating is stronger among female same-sex couples than among male same-sex couples.

Age and Educational Homogamy by Partnership Status

Using the same theoretical mechanisms behind assortative mating, we predicted there will be differences between married and cohabiting couples. On the basis of the marriage market arguments, we expected no differences between cohabiting and married heterosexual couples, because their marriage markets are the same. To illustrate this point, Schwartz (2010) showed for the United States that, at the start of a relationship, the educational resemblance between cohabiting partners equals that of married partners; differences in educational homogamy between cohabiting and married heterosexual couples result from selective exits. The unconventionality argument predicts that

cohabiting couples will be less homogamous than married couples. Cohabitation can be considered to be a transgression of the standard marriage norm (Thornton, Axinn, & Hill, 1992); cohabitators are therefore expected to transgress the matching standard as well, resulting in lower levels of assortative mating. In the Netherlands, cohabitation is widely accepted, and only a minority of couples marry without cohabiting first; those who marry directly are more religious and more traditional in their value orientation than others (Soons & Kalmijn, 2009). Differences are probably more relevant when looking at the commitment argument. Cohabiting relationships are often characterized as trial marriages and hence as less committed relationships than marriages (Oppenheimer, 1988). Lower levels of matching among cohabitators may then result from the less restrictive requirements in a potential partner. Finally, on the basis of the specialization argument, we expected—contrary to the previous arguments—that cohabiting partners will be more similar than married partners. The former have been argued to value equity more strongly than the latter (Blackwell & Lichter, 2000; Schoen & Weinick, 1993; Schwartz, 2010). Because an equal division of labor is more likely if neither partner has a relative advantage in the labor market over the other, we posited that cohabiting couples will express a stronger preference for partner similarity than will married couples.

METHOD

Data

We used the Dutch Labor Force Surveys that were collected annually by Statistics Netherlands. To obtain a satisfactory sample size, we pooled seven Labor Force Surveys (2001–2007), starting in 2001, which is the first year in which same-sex couples could legally marry. The Labor Force Surveys are conducted at the household level; interviews were conducted with each household member above age 15. They are representative of the Dutch population with response rates around 62%. We selected households in which exactly two persons indicated their position in the household as “member of a couple” (with or without children). On the basis of the gender composition of the couple, we then considered

the couple as male same sex, female same sex, or different sex. The household composition was first assessed at the start of the interview, jointly by the trained interviewer and the primary respondent. Next, each household member (age 15 and older) was interviewed separately and asked what position in the household one occupied and what relationship with the primary respondent one had. The sex of the two respondents was written down by the interviewer in the individual interviews. Note that the gender composition of the couple does not provide exclusive information on the sexual orientation of the two partners (e.g., some may identify themselves as bisexual or as homosexual but being in a heterosexual relationship). After categorizing sex composition, we divided couples by partnership status (married or cohabiting), which resulted in six types of couples. After selecting couples in which both partners were between the ages of 25 and 65 and after removing couples with missing data on one of the variables of interest, our analyses included 521 cohabiting male same-sex couples, 320 married male same-sex couples, 529 cohabiting female same-sex couples, 323 married female same-sex couples, 25,646 cohabiting different-sex couples, and 157,660 married different-sex couples. These numbers imply that, in the Labor Force Surveys, about 0.9% of all couples were same-sex couples. It is very difficult to say if these numbers are low. For example, Kuyper (2006) reported that 4% of men identified themselves as gay and 2.6% of women identified themselves as lesbian, but these numbers referred to the total population of men and women, and not only to those living together. It is possible that gay men and lesbians are less likely to be partnered than heterosexuals (Sandfort, de Graaf, de Bijl, & Schnabel, 2001). Potential selective nonresponse by sexual orientation is hard to assess. One way to get some feel for the severity of nonresponse may be to compare the share of male versus female same-sex married couples in our sample in the period 2001/2002 to their shares in the official marriage statistics. The assumption, then, is that almost all marriages sealed in that period were intact at the end of 2002 (this assumption becomes less plausible when the period is extended). The ratio between male and female same-sex couples who sealed their marriage in 2001/2002 is 1.15 (2,274/1,978; Statistics Netherlands: <http://statline.cbs.nl>). The ratio

between male and female same-sex married couples in our sample in those years is 1.12 (46/41). Although the numbers are only suggestive, they do not point at heavy nonresponse bias between male and female same-sex couples.

The data were cross-sectional, and we had no information on relationship duration. This implies that we observed all prevailing relationships at a particular point in time without being able to identify short-term or long-term relationships. Consequently, we could not strictly attribute patterns of couple resemblance to assortative mating; selective union dissolution and changes in partners' characteristics during the relationship might have affected homogamy as well. We did not expect, however, that partners influenced each others' highest educational level so much as they had often finished or at least started their educational career when they first met. Selective union dissolution could obviously still have affected the results. For the analyses of age homogamy, we relied on age differences rather than associations between partners' ages that were invariant to relationship duration (we explain this in the Design section).

The basic descriptive information on the variables of interest is provided in Table 1. For different-sex couples, the descriptive information for males and females is reported separately. For same-sex couples, we randomly selected one of the partners to be the respondent, the other being the spouse. Therefore, the descriptive information on the respondent and the spouse would be similar. Education was distinguished in four categories: (a) primary, (b) lower secondary, (c) higher secondary, and (d) tertiary. Using more categories would make the cross-tabulations too sparse for same-sex couples. The descriptive information in Table 1 demonstrates that men and especially women in same-sex relationships were relatively highly educated. Ages ranged from 25 through 65; the average age in our sample varied from 42.4 for men in same-sex couples to 45.8 for men in different-sex couples. Note that *age* refers to current age and not to age at the start of the union.

The fact that men and women in same-sex partnerships appeared to be more highly educated than their counterparts in different-sex partnerships may raise concerns about the selectivity of the sample. If the overrepresentation of highly educated same-sex couples resulted from the tendency that highly

Table 1. Descriptive Information on Men in Same-Sex Couples, Women in Same-Sex Couples, and Men and Women in Different-Sex Couples

Variable	Men in same-sex couples	Women in same-sex couples	Men in different-sex couples	Women in different-sex couples
Education				
Primary	5.0%	3.1%	7.7%	8.9%
Lower secondary	12.5%	10.5%	19.2%	24.8%
Higher secondary	39.4%	33.0%	42.3%	42.2%
Tertiary	43.2%	53.5%	30.8%	24.1%
χ^2 test: Same sex vs. different sex	70.7**	422.0**		
Age (range: 25–65)				
M	42.4	43.1	45.8	43.5
SD	9.9	9.5	10.3	10.3
T test: Same sex vs. different sex	9.57**	1.54		
Partnership status				
Married	38.1%	37.9%		86.0%
Cohabiting	62.0%	62.1%		14.0%
N couples	841	852		183,306

Note: Data are based on the Dutch Labor Force Surveys, 2001–2007.

** $p < .01$ (test within sex).

educated individuals were more likely to be overt about their sexuality and hence dared to form a couple (because forming a couple generally makes one's sexuality visible to the outside world), this study would not be affected. After all, a study on homogamy is, by definition, about couples. If the overrepresentation of highly educated same-sex couples resulted from highly educated same-sex couples being more likely to disclose their living arrangement to the interviewer than poorly educated same-sex couples, our results could be biased. We would argue, however, that this bias is limited because it is not plausible that respondents who share a household with someone of the same sex—one of the most explicit ways to show one's homosexuality to the outside world—would be reluctant in his or her openness toward the interviewer. Comparisons with other Dutch data sources using different sample procedures and interview methods (Kuyper, 2006; Sandfort et al., 2001) and data sets used in comparable international studies (Andersson et al., 2006; Jepsen & Jepsen, 2002; Schwartz & Graf, 2009) showed similar patterns of educational distribution by sexual orientation. This strengthened our confidence in the quality of our sample and comparability with existing studies.

Design

Educational homogamy was analyzed with correlations as well as log linear models. The latter express the relationship between partners'

characteristics while eliminating the influence of the marginal distributions. Partners' similarity in educational level was expressed in a uniform association parameter (Agresti, 2002; Goodman, 1979; Hout, 1983). The model is formulated below. In the formula, R refers to the respondent's education (with $i = 1, \dots, 4$), P refers to the partner's education (with $j = 1, \dots, 4$), and T refers to the type of union (with $k = 1, \dots, 6$); the six categories were (a) married male same sex, (b) cohabiting male same sex, (c) married female same sex, (d) cohabiting female same sex, (e) married different sex, and (f) cohabiting different sex. In different-sex couples, the male partner was the respondent and the female partner was the spouse. In same-sex couples, the respondent and partner were randomly assigned. The statistic F_{ijk} represents the number of couples in each cell of the cross-tabulation of respondent's education, partner's education, and type of union ($4 \times 4 \times 6 = 96$ cells):

$$\ln F_{ijk} = \mu + \lambda_i^R + \lambda_j^P + \lambda_k^T + \lambda_{ik}^{RT} + \lambda_{jk}^{PT} + \varphi_k R_i P_j + e_{ijk}$$

Here, μ reflects the grand mean. The λ_i^R and λ_j^P parameters adjust for the marginal distributions of respondent's and partner's education. The λ_{ik}^{RT} and λ_{jk}^{PT} parameters adjust for educational differences in the univariate educational distributions of the respondent and the partner across union types. The λ_k^T parameter adjusts for the numbers of couples in the different

types. The association between respondent's and partner's education was captured with a uniform association parameter φ . This uniform association parameter was equal to the log odds ratio of a 2×2 sub-table of adjacent cells in the larger table (Hout, 1983). The uniform association model was chosen for practical purposes: The tables for the various subgroups were too sparse to analyze more subtle patterns of association in the table. We allowed the strength of the uniform association parameter to vary among types of unions (indicated by the subscript k). In practice, this means we estimated the uniform association parameter within each type of union by including interaction terms between the product of respondent's and partner's education ($R_i P_j$) and dummy variables for each category of T (excluding a reference category). We made comparisons between different pairs of union types by reestimating the model with a different reference category.

We used a different strategy to analyze *similarity in age*. In the data, no information was available on age at the time of union formation. If we would instead have used the partners' *current* age, our results would have been upwardly biased, because couples grow old together. For example, in a cross-sectional survey in the Netherlands (Dykstra et al., 2004), the correlation between married partners' current ages was $r = .92$, whereas the correlation between their ages at the time of marriage was $r = .75$ (authors' own calculations). For this reason, we needed to look at the age *difference* between partners. This difference was not affected by marriage duration, because the age difference is constant as couples grow older. We presented absolute age differences for the six types of unions, and we reported t tests that assessed whether age differences varied significantly by sex composition and by partnership status. In addition, we presented a cross-tabulation to assess how common large age differences were in the six types of unions.

RESULTS

Educational Homogamy

The association between partners' educational levels by sex composition and partnership status is reported in Table 2. When we calculated zero-order correlations with the four-category education variables treated as linear variables (see upper panel of Table 2), we observed that

the correlation between spouses' education was weakest in male–male couples. Female–female couples and different-sex couples were more or less equally homogamous with respect to education. These crude measures suggested no substantial difference in assortative mating between married and cohabiting couples; only among female same-sex couples did educational similarity seem a bit larger in married couples, although this difference was not statistically significant.

Next, we turned to log linear modeling to demonstrate the tendency to have a partner with a similar educational level while taking into account the marginal distributions of education. The cell distributions that form the basis for this analysis can be found in the Appendix. We first estimated a model with one uniform association parameter (for all types of unions). This model had a fit of $\chi^2(53) = 5,033.4$. Adding interaction of uniform association and type of union led to a model with a fit of $\chi^2(48) = 4,992.3$. This was a significant improvement in fit, $\chi^2(5) = 41.1$. According to these fit measures, the model we used fit the data poorly ($p < 0.0001$), but because of the enormous number of cases in this sample the model fit was not a relevant instrument on which to judge the model, because even the smallest deviations were to be found significant. Therefore, more interesting than these fit values were the parameter estimates and the statistical and numerical differences between groups. These are presented in the bottom panel of Table 2.

The association parameters confirmed the conclusions based on the zero-order correlations: The overall association between partners' education was significantly weaker in male same-sex couples than in different-sex couples, and this was true regardless of whether we compared married or cohabiting couples. The difference was substantial: The odds ratio was 22% lower when we looked at cohabiting couples ($e^{0.521}$ for male same-sex couples vs. $e^{0.768}$ for different-sex couples) and 18% lower when looking at married couples ($e^{0.516}$ for male same-sex couples vs. $e^{0.712}$ for different-sex couples). Female same-sex couples did not have a weaker uniform association than different-sex couples. A comparison by partnership status revealed no significant difference between married and cohabiting couples in male and female same-sex couples. In different-sex couples, we found a significant difference, but this was due

Table 2. Correlations and Uniform Association Parameter Estimates From Log Linear Models for Educational Homogamy by Sex Composition of the Couple and Partnership Status (N = 184,999 Couples)

Estimate	All	Cohabiting	Married	Test cohabiting–married ^a
Correlations				
Male same sex	.35	.34	.36	−0.32
Female same sex	.49	.47	.52	−0.93
Different sex	.47	.48	.47	1.92
Uniform association parameters ^b				
Male same sex	n.e.	.521	.516	.05
Female same sex	n.e.	.814	.824	−.07
Different sex	n.e.	.768	.712	4.62**
Test male same sex–different sex ^a		−3.33**	−2.25*	
Test female same sex–different sex ^a		0.51	0.98	
Test male same sex–female same sex ^a		−2.53*	−2.14*	

Note: Table values are based on data from the Dutch Labor Force Surveys, 2001–2007. n.e. = not estimated.

^aDifferences in correlation and in uniform association parameter between groups evaluated with a z test. ^b $\chi^2 = 4,992.3$ with 48 degrees of freedom. See the text for a description of the model.

* $p < .05$. ** $p < .01$.

to the very large sample size. Numerically, the difference was not important. Note, however, that cohabiting couples tended to be *more* similar than married couples. Overall, we conclude that male same-sex couples have lower levels of assortative mating than female same-sex and different-sex couples and that sex composition of the couple appears to be a much stronger divide than partnership status.

Age Similarities

As shown in Table 3, age differences were much larger in same-sex couples than in different-sex couples. The absolute age difference amounted to 5.9 years in male–male couples and to 4.8 in female–female couples, which were 82% and 46% larger, respectively, than the age difference in male–female couples (3.3 years). Also, the difference between male and female same-sex couples was significant and substantial: The age difference in male same-sex couples was one quarter larger than in female same-sex couples. With respect to age, we found that married couples tended to be more similar than cohabiting couples. For example, married partners in different-sex couples differed, on average, 3.2 years versus 4.0 years for cohabiting partners. The same pattern, but with age differences much smaller in size and not reaching the level of significance, was observed in male and female same-sex couples. Therefore, we again conclude that men in same-sex couples are least homogamous and that the sex composition

of the couple is a much stronger determinant for assortative mating than partnership status.

To evaluate the magnitude of these patterns, we also presented age differences in a discrete fashion. Among male partners in same-sex relationships, 17% differed 11 or more years in age, and another 24% differed 6 to 10 years. Compared to female same-sex couples (11% and 22%, respectively), but especially compared to different-sex couples (4% and 13%, respectively), these numbers showed that large age differences are all but uncommon among male–male couples.

DISCUSSION

We studied assortative mating among cohabiting and married male same-sex, female same-sex, and different-sex partners in the Netherlands using large-scale nationally representative surveys. The explicit inclusion of same-sex couples extends our knowledge about assortative mating in small groups. The opportunity to distinguish between married and cohabiting couples in same-sex partnerships is a unique contribution to the literature. The comparison of these six types of couples was not only of value in a descriptive sense but also provided room for an exercise to extend existing theoretical explanations on partner similarity and on differences between marriage and cohabitation to a special case, that is, to same-sex couples. We focused on assortative mating with respect to education and age.

Table 3. Age Differences Between Partners by Sex Composition of the Couple and Partnership Status

Estimate	All	Cohabiting	Married	Test cohabiting–married ^a
Mean age differences in years				
Male same sex	5.94	6.05	5.77	0.70
Female same sex	4.76	4.80	4.71	0.29
Different sex	3.27	3.96	3.15	38.29**
Test male same sex–different sex ^a	24.58**	12.26**	15.57**	
Test female same sex–different sex ^a	13.88**	4.99**	9.33**	
Test male same sex–female same sex ^a	4.95**	4.09**	2.80**	
Age differences in categories				
Male same-sex				
0–2 years difference	32.9%	33.0%	32.8%	
3–5 years difference	25.8%	24.4%	28.1%	
6–10 years difference	24.5%	25.7%	22.5%	
11+ years difference	16.8%	16.9%	16.6%	
Female same sex				
0–2 years difference	34.6%	35.4%	33.4%	
3–5 years difference	33.1%	31.6%	35.6%	
6–10 years difference	21.8%	23.4%	19.2%	
11+ years difference	10.5%	9.6%	11.8%	
Different sex				
0–2 years difference	50.9%	44.9%	51.9%	
3–5 years difference	32.3%	30.5%	32.6%	
6–10 years difference	13.3%	18.1%	12.5%	
11+ years difference	3.5%	6.5%	3.0%	

Note: Table values are based on data from the Dutch Labor Force Surveys, 2001–2007.

^aMean differences between groups evaluated with a *t* test.

***p* < .01.

The first important finding is that similarity in both education and age was weakest among male same-sex couples. Female same-sex couples did not differ from different-sex couples with respect to educational assortative mating, but they did have larger age differences. Our finding of weaker educational homogamy among male–male couples is consistent with earlier research on the United States and Scandinavian countries (Andersson et al., 2006; Jepsen & Jepsen, 2002; Schwartz & Graf, 2009). Because the Dutch context is characterized by high levels of tolerance toward homosexuality, the similarity of our results to those yielded by research in the United States is interesting. Together with the Scandinavian findings, there seems to be an emerging pattern of “similar differences” in “different contexts.” If these country comparisons are used to speculate on the validity of our theoretical arguments, they may suggest that the most culturally based argument—the notion of unconventionality—may be less relevant for the way partners select each other compared to the more culturally neutral arguments, such as the small size of the group or perhaps lower levels of stability. Note that this tentative conclusion generalizes across societies and does

not take into account regional differences in the acceptance of homosexuality within countries, which is, one would presume—especially in the United States—very large. An important and interesting observation we would like to point out is the universal pattern that, even in very small groups, where meeting and mating in the conventional meeting settings is less likely, assortative mating is clearly strong and present. Because such conventional meeting settings are central determinants of homogamy (Kalmijn & Flap, 2001), this also suggests that preferences for educational similarity are an important explanation for homogamy.

The second important finding is that partnership status does not have a clear effect on assortative mating. Married different-sex couples were somewhat more similar in age than cohabiting couples, but they were somewhat less similar in education. These differences were small, however. For same-sex couples, differences between married and cohabiting couples were absent. In comparison, results on different-sex couples in the United States are mixed, but studies tend to find the opposite, namely, that cohabitators are less likely to resemble each other in education than married couples

(Schwartz, 2010). The small differences between Dutch married and cohabiting couples suggest that cohabitation in the Netherlands is not so much of a trial marriage as it is in, for example, the United States. Our finding that different-sex cohabiting couples were less similar in age than their married counterparts may be the result of the fact that second unions more often are cohabiting unions, and second unions are also characterized by larger age differences (Gelissen, 2004). This study demonstrates that the sex composition of the couple is more important than partnership status for assortative mating.

The validity of the theoretical mechanisms behind assortative mating could not be directly assessed by empirical tests. When comparing the expected and actual differences between relationship types, we had to conclude that the theoretical arguments about marriage markets, unconventionality, and relationship commitment can in principle explain the weaker age similarity in male and female same-sex couples and the weaker educational similarity in male same-sex couples as compared to different-sex couples. However, these same arguments could not satisfactorily explain the position of female same-sex relationships, which appeared not to differ in educational assortative mating from different-sex couples. The significantly higher educational and age similarity between female partners compared to male partners would be consistent with the argument that lesbian women select more strongly on education and age because they attach more value to an egalitarian relationship, our fourth theoretical argument (Schwartz & Graf, 2009). But this does not explain why female–female couples were similar to male–female couples. An explanation is needed to explain why male same-sex couples stand out. It may be that other traits in the marriage market play a role and that these traits overrule or compensate for educational differences. Future research is needed to provide a more complete view of the assortative mating process.

Future research could focus on longitudinal data. In our cross-sectional study, we observed only unions that had not dissolved until the moment of the interview. A study conducted by Kalmijn et al. (2007) demonstrated that same-sex couples in the Netherlands are indeed more likely to experience a union dissolution. If dissolution is also more likely among heterogamous couples, then we would overestimate the levels of assortative mating among same-sex couples

because we observe only intact relationships that—following this assumption—will be relatively more homogamous because of selective exits. This scenario would further increase the gap between male same-sex couples and different-sex couples, but it could explain why female same-sex couples are so similar in educational assortative mating as different-sex couples, especially because, in Scandinavian countries, female–female couples were shown to have the highest dissolution risks (Andersson et al., 2006). The assumption that dissolution risks are negatively related with educational and age homogamy has not been proven; research on this relationship has produced mixed results. To assess this alternative explanation, data that record partners' attributes at the start of the relationship are essential, but unfortunately these are not yet available with sufficient sample sizes.

REFERENCES

- Agresti, A. (2002). *Categorical data analysis*. New York: Wiley.
- Andersson, G., Noack, T., Seierstad, A., & Weedon-Fekjær, H. (2006). The demographics of same-sex marriages in Norway and Sweden. *Demography*, *43*, 79–98.
- Becker, G. S. (1981). *A treatise on the family*. Cambridge, MA: Harvard University Press.
- Black, D. A., Gates, G., Sanders, S., & Taylor, L. (2000). Demographics of the gay and lesbian population in the United States: Evidence from available systematic data sources. *Demography*, *37*, 139–154.
- Blackwell, D. L., & Lichter, D. T. (2000). Mate selection among married and cohabiting couples. *Journal of Family Issues*, *21*, 275–302. doi:10.1177/019251300021003001
- Blackwell, D. L., & Lichter, D. T. (2004). Homogamy among dating, cohabiting, and married couples. *Sociological Quarterly*, *45*, 719–737. doi:10.1111/j.1533-8525.2004.tb02311.x
- Blumstein, P., & Schwartz, P. (1983). *American couples: Money, work, sex*. New York: William Morrow.
- Boele-Woelki, K., & Fuchs, A. (Eds.). (2003). *Legal recognition of same sex couples in Europe*. Antwerp, Belgium: Intersentia.
- Ciano-Boyce, C., & Shelley-Sireci, L. (2002). Who is Mommy tonight? Lesbian parenting issues. *Journal of Homosexuality*, *43*, 1–13. doi:10.1300/J082v43n02_01
- Dykstra, P. A., Kalmijn, M., Knijn, T. C. M., Komter, A. E., Liefbroer, A. C., & Mulder, C. H. (2004). *The Netherlands Kinship Panel Study, 2002–2003*. The Hague, the Netherlands: Netherlands' Interdisciplinary Demographic Institute.

- Fischer, C. (1995). The subcultural theory of urbanism: A twentieth-year assessment. *American Journal of Sociology*, *110*, 543–577.
- Gelissen, J. (2004). Assortative mating after divorce: A test of two competing hypotheses using marginal models. *Social Science Research*, *33*, 361–384. doi:10.1016/j.ssresearch.2003.06.003
- Goldberg, A. E., & Perry-Jenkins, M. (2007). The division of labor and perceptions of parental roles: Lesbian couples across the transition to parenthood. *Journal of Social and Personal Relationships*, *24*, 297–318. doi:10.1177/0265407507075415
- Goodman, L. A. (1979). Simple models for the analysis of association in cross-classifications having ordered categories. *Journal of the American Statistical Association*, *74*, 537–552. doi:10.1080/01621459.1979.10481650
- Halman, L., Sieben, I., & Van Zundert, M. (2011). *Atlas of European values: Trends and traditions at the turn of the century*. Leiden, the Netherlands: Brill.
- Hekma, G. (2004). *Homoseksualiteit in Nederland van 1730 tot de moderne tijd [Homosexuality in the Netherlands from 1730 until modern times]*. Amsterdam: Meulenhoff.
- Hout, M. (1983). *Mobility tables*. Beverly Hills, CA: Sage.
- Jaspers, E., & Verbakel, E. (2013). The division of paid labor in same-sex couples in the Netherlands. *Sex Roles*, *68*, 335–348. doi:10.1007/s11199-012-0235-2
- Jepsen, L. K., & Jepsen, C. A. (2002). An empirical analysis of the matching patterns of same-sex and opposite-sex couples. *Demography*, *39*, 435–453.
- Kalmijn, M. (1998). Inter-marriage and homogamy: Causes, patterns, trends. *Annual Review of Sociology*, *24*, 395–421. doi:10.1146/annurev.soc.24.1.395
- Kalmijn, M., & Flap, H. (2001). Assortative meeting and mating: Unintended consequences of organized settings for partner choices. *Social Forces*, *79*, 1289–1312. doi:10.1353/sof.2001.0044
- Kalmijn, M., Loeve, A., & Manting, D. (2007). Income dynamics in couples and the dissolution of marriage and cohabitation. *Demography*, *44*, 159–179.
- Kamp Dush, C. M., & Amato, P. R. (2005). Consequences of relationship status and quality for subjective well-being. *Journal of Social and Personal Relationships*, *22*, 607–627.
- Kelley, J. (2001). Attitudes towards homosexuality in 29 nations. *Australian Social Monitor*, *4*, 15–22.
- Kurdek, L. A., & Schmitt, J. P. (1987). Partner homogamy in married, heterosexual cohabiting, gay, and lesbian couples. *Journal of Sex Research*, *23*, 212–232. doi:10.1080/00224498709551358
- Kuyper, L. (2006). Seksualiteit en seksuele gezondheid bij homo-en biseksuelen [*Sexuality and sexual health of homosexual and bisexual people*]. In F. Bakker & I. Vanwesenbeeck (Eds.), *Seksuele gezondheid in Nederland 2006* (pp. 167–188). Delft, the Netherlands: Eburon.
- McFarland, D. (1975). Models of marriage formation and fertility. *Social Forces*, *54*, 66–83. doi:10.1093/sf/54.1.66
- Noack, T., Seierstad, A., & Weedon-Fekjær, H. (2005). A demographic analysis of registered partnerships (legal same-sex unions): The case of Norway. *European Journal of Population*, *21*, 89–109. doi:10.1007/s10680-005-3626-z
- Oppenheimer, V. K. (1988). A theory of marriage timing. *American Journal of Sociology*, *94*, 563–691.
- Rosenfeld, M. J., & Kim, B. (2005). The independence of young adults and the rise of interracial and same-sex unions. *American Sociological Review*, *70*, 541–562. doi:10.1177/000312240507000401
- Sandfort, T. G. M., de Graaf, R., de Bijl, R. V., & Schnabel, P. (2001). Same-sex sexual behavior and psychiatric disorders. Findings from the Netherlands Mental Health Survey and Incidence Study (NEMESIS). *Archives of General Psychiatry*, *58*, 85–91. doi:10.1001/archpsyc.58.1.85
- Schoen, R., & Weinick, R. M. (1993). Partner choice in marriages and cohabitations. *Journal of Marriage and the Family*, *55*, 408–414.
- Schwartz, C. R. (2010). Pathways to educational homogamy in marital and cohabiting unions. *Demography*, *47*, 735–753.
- Schwartz, C. R., & Graf, N. L. (2009). Assortative matching among same-sex and different-sex couples in the United States, 1990–2000. *Demographic Research*, *21*, 843–878. doi:10.4054/DemRes.2009.21.28
- Solomon, S. E., Rothblum, E. D., & Balsam, K. F. (2005). Money, housework, sex, and conflict: Same-sex couples in civil unions, those not in civil unions, and heterosexual married siblings. *Sex Roles*, *52*, 561–575. doi:10.1007/s11199-005-3725-7
- Soons, J. P. M., & Kalmijn, M. (2009). Is marriage more than cohabitation? Well-being differences in 30 European countries. *Journal of Marriage and Family*, *71*, 1141–1157. doi:10.1111/j.1741-3737.2009.00660.x
- Sullivan, M. (1996). Rozzie and Harriet? Gender and family patterns of lesbian coparents. *Gender & Society*, *10*, 747–767. doi:10.1177/089124396010006005
- Thornton, A., Axinn, W. G., & Hill, D. H. (1992). Reciprocal effects of religiosity, cohabitation, and marriage. *American Journal of Sociology*, *98*, 628–651.

