

Social Structure and Personality Assortment Among Married Couples

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Abstract

We study the influence of social structure on assortative mating for personality in a large national sample (n=3616) of married and cohabitating couples in the Netherlands. We find that couples with higher levels of education and from dissimilar religious origins are more similar with regard to prosocial personality characteristics. Because levels of education and religious heterogeneity have increased, assortative mating for prosocial personality increases.

Introduction

Spouses tend to be more similar to each other on a number of traits than a pair of two other randomly selected individuals. This paper answers two questions on spousal similarity. The first question is descriptive: how strong is spousal similarity with regard to personality, level of education, and religion among married couples in the Netherlands? Second: how does the marriage market affect spousal similarity?

Spousal similarity has received a lot of attention from sociologists, psychologists and behavioural geneticists. In behavioural genetics, spousal similarity is called assortative mating or marital assortment. It is studied because spousal similarity affects heritability estimates in twin and adoption studies.¹ In sociology, spousal similarity is called homogamy. It is studied because homogamy is an indicator of the openness of society. Sociologists have documented major trends in homogamy in the past century: declining homogamy with regard to religion, and increasing homogamy with regard to education. In psychology, spousal similarity is studied in the attraction paradigm (Byrne, 1971) that affects not just spousal relations, but also relations between strangers (Burger et al. 2001) and even buyers and sellers on a market (Cialdini, 2001).

In each of these research traditions it is assumed that people generally prefer to have interactions with others who are like themselves. This paper focuses on spousal similarity with regard to personality characteristics. If there is one type of relationship where one would expect people to try to fulfil their desire for interactions with similar others, it is the relationship that for most people is the most enduring one in their entire life: the spousal relationship. While opposites attract for short term affairs, similarity is preferred for marriage (Amodio & Showers, 2005).

It seems like a good idea for spouses to select each other on the basis of personality characteristics. Personality is highly stable throughout the life course (Roberts & DelVecchio, 2000). Personality characteristics like agreeableness and neuroticism are good predictors of

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¹ The direction of the bias is different in twin studies than in adoption studies (Krueger et al., 1998).

marital conflicts and ultimately of union dissolution, even across different relationships (Robins, Caspi & Moffitt, 2002). But despite the fact that most people desire to have a spouse with similar personality characteristics, spousal similarity with regard to personality has been found to be rather low in most studies: correlations between personality characteristics of spouses are usually below .15. Spousal similarity is much higher for other characteristics like age (.90-.95), religious affiliation (.80-.90), and the level of education (.45-.55).

In theory, spousal similarity with regard to personality may be affected at three stages in the marital career (see figure 1): before the actual relationship, when selecting a spouse; during the relationship, when living together with the spouse; and when the relationship ends.

Figure 1. Influences on spousal similarity in three stages of the marital career

| Stage 1: Selection | Stage 2: Union | Stage 3: Dissolution |
|-------------------------------------|----------------------------------|-------------------------|
| 1. Availability: meeting chances | 2. Acceptability: group norms | |
| | 3. Divergence or convergence | |
| | | 4. Selective attrition |

A first mechanism that affects spousal similarity with regard to personality is the ‘propinquity effect’. As Buss (1986) expressed it: ‘The one and only typically lives within driving distance’. And attends the same church and goes to the same school, one might add. A second mechanism that affects spousal similarity in the selection stage is that social groups determine the acceptability of potential spouses as marriage partners based on observable characteristics like social status and religious affiliation. Many social groups try to discourage marriages with members of other status or religious groups.

A third mechanism affects spousal similarity during the relationship. Spouses may become more or less similar as time passes. Perhaps one would expect that convergence occurs rather than divergence, but in fact this is not what occurs for most traits (Buss, 1984). As spouses live together for a longer period of time, they tend to become less rather than more similar – if anything.

A fourth mechanism that affects spousal similarity is selective attrition from the population of married couples. When less similar spouses are more likely to have conflicts and are more likely to dissolve their relationship, spousal similarity should increase due to selective attrition of (initially) less similar couples from the population of couples.

Availability

First, social structure limits the number of meeting chances. Sociologists have shown that ‘mating requires meeting’ (Kalmijn & Flap, 2001): “the pool of available interaction partners is shaped by various institutionally organized arrangements and those constrain the type of people with whom we form personal relationships”. Who encounters whom in social relations is governed by the homophily principle (McPerson & Smith-Lovin, 2001). People have a preference for social relations with others who are more similar with respect to their religion, ethnicity, and social status. Even in heterogeneous communities, social relationships tend to be structured by shared religious, status or ethnic background. This reduces the number of meeting chances for marriage partners from different religious, status or ethnic groups. Meeting chances are also limited in certain areas because the sheer number of

potential partners is limited. In rural areas, a lower number of people live close to each other than in metropolitan areas. The geographical distance to a potential marriage partner with similar characteristics is lower in metropolis than in the countryside. Peter Blau powerfully expressed the role of meeting chances in the one-liner “You can’t marry an Eskimo when there’s no Eskimo around” (Völker & Flap, 1997).

Acceptability

Second, social norms limit the acceptability of specific categories of potential marriage partners among those who are available. Many social groups have norms proscribing that members should marry with ingroup members, and discourage marriage with outgroup members. A psychologically perfect marriage partner may be socially unacceptable because she is from a different (usually lower) social status group or has a different religion. Social norms thus create a further reduction of the number of feasible marriage partners.

West European societies have witnessed massive changes in social structure in the past century. In the present paper, we study assortative mating in the Netherlands. The Netherlands is an interesting case because a massive trend of secularization has strongly increased meeting chances for members of different religious groups. In 1899, 98% of the Dutch population was affiliated with organized religion. In 2000, this has dropped to less than 50%. Secularization also increased the number of social relations between members of different religious groups (so called ‘pillars’, Lijphart, 1975). While social contacts between members of different religious groups in general were not very common at the beginning of the twentieth century, and marriages in particular were rare, they are very common today. Religion is much less important cleavage in Dutch society than it used to be in the heydays of pillarization. In the past, religious groups limited availability and acceptability of potential spouses to a larger extent than they do today. As a result, the number of marriages that are heterogeneous with respect to religion has increased, and the number of potential spouses increased. Spouses that used to be unavailable or unacceptable because they were affiliated with a different religion became available and/or acceptable. This increases the possibilities for spouses to select each other on the basis of matching personality characteristics. Thus, we would expect increasing religious heterogamy to increase spousal similarity with regard to personality.

A second trend in Dutch society in the past decades is educational expansion. Today, young people spend more years in school than fifty years ago and more students complete tertiary education.² Increasing educational attainment, mainly of women, has profoundly changed the labor market, gender roles, and family life. Higher educated people are less likely to marry than the lower educated, and if higher educated people marry they do so at a later age. One of the results of postponing marriage when in education is that the higher educated have more time to meet the ‘one and only’. In addition, marriage markets in cities where universities are located are usually larger and contain a higher number of potential spouses. As a result, the higher educated are likely to have higher standards for spouse selection. If they do not find a suitable candidate, they may decide not to marry at all. Those who do marry, are more likely to be similar with regard to personality.

² Because schools are populated with children from relatively homogeneous backgrounds, lengthening the period that young people spend in education increases the likelihood of developing friendship networks with others who have similar socio-economic backgrounds. Educational expansion limits chances for meeting potential partners with different levels of education. This does not strongly affect possibilities for spouses to select each other on the basis of matching personality characteristics, because the level of education is only weakly related to personality characteristics. Furthermore, the characteristics that are related to education are not the prosocial characteristics that are most likely to be selected for in the marriage market. In the datasets used in this article, all correlations of the level of education with personality characteristics were below .05, except for positive affect (.17, $p < .000$) and openness in the FSDP (.180, $p < .000$).

Spousal influence and convergence

We think it is unlikely that spouses change each other's personality in marriage so that spouses become more similar. While marriage promotes maturation, such that spouses' mean levels of dominance, agreeableness, conscientiousness and emotional stability increase in the course of their lives, the rank order stability of personality is very high during adulthood (Caspi, Roberts & Shiner, 2005). Mascie-Taylor (1989) and Watson et al. (2004) found no evidence of convergence, and Buss (1984) even found evidence for divergence. If anything, couples may become less rather than more similar in a continuing relationship.

Attrition

An important selection process after marriage is that neuroticism increases the risk of divorce (see references in Neyer and Asendorpf, 2001). The same is true for openness (Jockin, McGue & Lykken, 1996), allegedly because openness is related to criticism (Bouchard & Arseneault, 2005). Agreeableness, in contrast, lowers the risk of divorce, because it is correlated with smooth communication, and a forgiving predisposition. One would expect that similarity in personality also lowers the risk of divorce. More similar couples are more likely to stay together. In sum: spouses with higher levels of neuroticism and openness, spouses with lower levels of agreeableness, and couples with more dissimilar personalities at the time of marriage are more likely to divorce.³

Which personality traits should be more similar among spouses?

On the marriage market, people generally prefer partners who have a prosocial personality. Buss and Barnes (1986) find that *kind, easygoing and socially exciting* are the three most highly valued traits in mates. Todosijevic et al. (2003) find that *sincerity, faithfulness, and tenderness* are the three most valued traits in romantic partners, while the three least valued traits were *insecurity, selfishness, and conceitedness*. Sprecher & Regan (2002) find that *warmth and kindness* is by far the most highly valued trait in marriage partners. The high importance of prosocial personality is virtually the same among males and females. One would expect that correlations between levels of agreeableness of spouses are more positive than for other traits. Empirical studies, however, do not support this hypothesis. Previous research, however, typically relies on convenience samples of students, and has not used conventional measures of agreeableness.

What is new here?

This is the first large scale study of spousal similarity using a nationally representative sample. With a few exceptions (e.g., Donnellan, Conger & Bryant, 2004), previous studies have mostly relied on small samples of university students. Potentially because of the small sample sizes, spousal correlations in previous studies vary widely. Botwin, Buss and Shackelford (1997) found significant correlations ranging between .22 and .30 for agreeableness and conscientiousness, and correlations between .38 and .51 for openness. Donnellan, Conger & Bryant (2004) found positive relations between spousal reports of neuroticism (.16) and openness (.17), but not for other characteristics. Other studies have found positive correlations among spouses with regard to antisocial behaviour (Galbaud du

³ Similarity may also be due to shared measurement error, for instance when spouses copy each other's responses in the personality questionnaire. We cannot exclude this possibility. However, such shared measurement errors only endanger our conclusions on predictors of similarity when the error is correlated with predictors of similarity. We can think of no compelling arguments for such a correlation. On the other hand, there is also evidence showing that spouses sometimes exaggerate their differences (Murray, Bellavia, Dolderman, Holmes & Griffin, 2002).

Fort et al., 2002; Krueger et al., 1998), neuroticism (.21), openness (.32), agreeableness (.23) and negative affect (.17, Watson et al., 2004).

Data and methods

We use data from three nationwide household surveys from the Netherlands. The first two are the Family Survey of the Dutch Population 2000 (FSDP00) and its precursor, the Family Survey of the Dutch Population 1998 (FSDP98). The surveys were conducted by the Department of Sociology, Radboud University Nijmegen. This survey provides detailed information on marital history and socioeconomic background of both spouses.

The third source of data is the 1996 wave of the Savings Survey of the Dutch National Bank (SS96). While this survey was conducted to map determinants of financial behaviour, it also contains data on personality and marital history. Unfortunately, the survey does not provide data on key social background characteristics like religion.

In the combined FSDP98 and FSDP00 dataset, 3188 respondents are cohabitating or married. A large majority of couples are married ($n=1404$). 190 couples are cohabitating.⁴ In the DNB dataset, 3463 respondents are cohabitating or married.

Measures

Table A in the appendix shows which measures are available in the three data sources. *Education* is an ordinal variable in seven categories, ranging from no formal education or primary school (1) to postdoctoral degree (7). *Religious affiliation* was measured with the question ‘Do you consider yourself a member of a church or religious community?’, and if yes, respondents indicated which religion they were affiliated with (Catholic, Reformed Protestant, Rereformed Protestant, or other religion). Four dummy variables were created. *Church attendance* was measured with the question ‘How often do you attend church?’. Responses were recoded to the number of times per year the respondents attend church. *Verbal proficiency* was measured with a vocabulary test in which respondents had to select the correct synonym for 12 difficult words. This test was modelled after the WORDSUM variable in the General Social Survey (Alwin, 1991). Previous research found that the vocabulary test is a reliable proxy measure of verbal ability that is strongly correlated with other measures of crystallized intelligence (Alwin, 1991). Denissen (2001) computed average spousal correlations of crystallized intelligence reported in previous studies, and found them to be somewhat weaker (average .30) than for education (average .48). *Big Five* personality scores were obtained with a 30 item adjective checklist in the FSDP00. The instrument was developed by Gerris et al. (1998), who translated the set of 100 markers developed by Goldberg (1992) into Dutch and selected 6 items for each factor based on a factor analysis. Respondents were asked to what degree these adjectives apply to themselves on a scale of 1 (‘Does not fit me at all’) to 7 (‘Fits me completely’). In the FSDP2000, Cronbach’s Alpha coefficients for the five factors were .82, .83, .87, .77 and .80 for extraversion, agreeableness, conscientiousness, neuroticism and openness, respectively. In the FSDP1998, these coefficients were .83, .84, .88, .85, .82, and .80. Factor scores were saved and used in the analyses.

Empathy was measured with a Dutch translation of the empathic concern scale of the Interpersonal Reactivity Index (Davis, 1994). The 6 item scale had a reliability of .68. *Social value orientation* was measured with a slightly different procedure than in previous research due to space restrictions in the survey (for a description of the traditional method, see Van Lange et al. 1997). Respondents were asked to provide a rank order to four self-other distributions in two tables (see Bekkers 2004). The rank orders reflect the degree to which

⁴ To simplify the discussion, we refer to cohabitating couples as ‘spouses’, ‘husbands and wives’ and to their union as ‘marriage’.

respondents have the tendency to give away points to the unknown other (or to keep them for themselves). On average, the respondents gave away 42% of the points to the other (and kept 58% for themselves). The proportion of points donated to the other served as the measure for social value orientation.

Satisfaction with life was measured with five statements ($\alpha=.85$; sample item: "I am satisfied with my life"). *Positive and negative affect* were measured with adjective checklists describing 10 positive ($\alpha=.84$; e.g. 'proud') and 10 negative emotions ($\alpha=.86$, e.g. 'sad'). Respondents reported on a 1-5 scale ('never' to 'very frequently') how many times they had experienced the emotion in the past month. *Loneliness* was measured with 11 items ($\alpha=.89$; sample item: "I often feel deserted by others"). *Subjective happiness* was measured in the SS96 with a single item: "To what extent do you find yourself happy in your life?"

Prosocial personality. Two prosocial personality composite scores were created, one for the FSDP98 and one for the FSDP2000, because both surveys contain different sets of prosocial personality characteristics. In the 1998 survey, z-scores for agreeableness, positive affect, negative affect (reverse coded) and satisfaction with life were averaged. In the 2000 survey, z-scores for agreeableness, empathic concern and social value orientation were averaged. A combined composite score was created, assuming that both composites measure similar concepts.

Controls. In regression analyses, we control for marital status (1=married; 0=unmarried cohabitation) because cohabitating relationships are more often end in dissolution than marriage. It may be that cohabitating couples accept lower level of similarity because they have made fewer commitments than married couples. In that case, marital status will have a positive effect on similarity.

Results

Table 1 shows correlations among spouses of the personality traits and selected socio-demographic variables in our sample in decreasing order of similarity. We find very strong spousal similarity with regard to age (.94), level of education (.52, .40), religious affiliation (.45 to .52), and cognitive ability (.47). Personality similarity among spouses is considerably weaker (varying from -.04 to .38). The strongest spousal similarity we find for loneliness (.38) and satisfaction with life (.31), but these traits are susceptible to spousal influence.⁵ Current shared environment or convergence will create a positive correlation between the loneliness and satisfaction with life of the husband and these traits among their wives. Among the other personality characteristics, prosocial traits show the highest level of spousal similarity: social value orientation (.27), empathic concern (.19), positive affect (.17) and agreeableness (.17). Negative affect and openness are also positively correlated among husbands and wives. There are no significant spousal correlations between levels of neuroticism, conscientiousness, and extraversion.⁶

⁵ It may be interesting to relate satisfaction with life to similarity. Are more similar couples more satisfied with their lives? Nemecek & Olson (1999) show that similarity on conscientiousness promotes marital adjustment among husbands and wives; agreeableness (compliance) among husbands, and neuroticism among wives. Murray et al. (2002) suggest that the relation between similarity and satisfaction may be more in the perceptions of spouses than in reality.

⁶ There are many significant gender differences in the characteristics in table 1. Husbands score higher than their wives on cognitive ability, education, openness and loneliness (differences decreasing in that order). Wives, on the other hand, have significantly higher levels of neuroticism, negative affect, empathic concern, social value orientation, extraversion, perspective taking, agreeableness, satisfaction with life, and conscientiousness than

The data reveal evidence for convergence with regard to religious affiliation: spousal similarity with regard to current religious affiliation is higher than for similarity at date of marriage: .632, .532, .641, and .673 (all $p < .000$) for Catholic, Reformed, Rereformed and other religious affiliation respectively.

Table 1. Spousal similarity (source: FSDP98, FSDP00, SS96)

| | FSDP | | SS96 | |
|---|----------|----------|----------|----------|
| | <i>r</i> | <i>p</i> | <i>r</i> | <i>p</i> |
| Age | .950 | .000 | .942 | .000 |
| Church attendance | .868 | .000 | | |
| Education | .519 | .000 | .398 | .000 |
| Catholic affiliation (at marriage) | .520 | .000 | | |
| Other religious affiliation (at marriage) | .478 | .000 | | |
| Cognitive ability | .470 | .000 | | |
| Rereformed (at marriage) | .448 | .000 | | |
| Subjective happiness | | | .442 | .000 |
| Loneliness | .367 | .000 | | |
| Reformed (at marriage) | .333 | .000 | | |
| Satisfaction with life | .323 | .000 | | |
| Social value orientation | .265 | .000 | | |
| Empathic concern | .193 | .000 | | |
| Agreeableness | .193 | .000 | .203 | .000 |
| PANAS positive | .176 | .000 | | |
| PANAS negative | .127 | .001 | | |
| Openness | .080 | .002 | .077 | .016 |
| Extraversion | .041 | .112 | .052 | .106 |
| Neuroticism | .019 | .456 | -.035 | .280 |
| Conscientiousness | .008 | .767 | .052 | .101 |
| Prosocial personality composite 1998 | .220 | .000 | | |
| Prosocial personality composite 2000 | .165 | .000 | | |
| Prosocial personality composite combined | .194 | .000 | | |

Education, religious background and spousal similarity

In a first set of bivariate analyses, spousal similarity for personality characteristics was estimated for spouses with different levels of education completed and with different religious backgrounds. These analyses assume that effects of increasing education become apparent in increased similarity between spouses with higher levels of education.

Table 2 reveals that personality similarity with regard to prosocial characteristics among the FSDP respondents tends to increase with the level of education completed. The pattern is most clear for the prosocial personality composite in the 1998 survey: spousal similarity increases from .15 among primary educated persons, through .21 for persons who completed secondary education to .28 for those who completed tertiary education. The pattern for the prosocial personality composite score in the 2000 survey and for agreeableness is less clear. This is because similarity with regard to empathic concern decreases education.

their husbands. There is no difference between husbands and wives in the level of positive affect or religious affiliation.

Similarity with regard to positive and negative affect and loneliness also increase with education. Similarity with regard to other characteristics does not follow a distinct pattern.

Table 2. Spousal similarity by level of education completed (source: FSDP)

| | Primary | Secondary | Tertiary |
|------------------------------|----------------|------------------|-----------------|
| Prosocial composite 1998 | *.151 | ***.212 | ***.280 |
| Prosocial composite 2000 | *.150 | ***.218 | (*).104 |
| Prosocial composite combined | ** .152 | ***.219 | ***.204 |
| Agreeableness | ***.190 | ***.178 | ***.213 |
| Openness | ** .148 | .030 | .028 |
| Neuroticism | -.015 | (*).074 | -.046 |
| Conscientiousness | .030 | .017 | -.025 |
| Extraversion | .014 | .050 | .056 |
| Social value orientation | ***.218 | ***.331 | *.199 |
| Empathic concern | ***.203 | ** .187 | *.166 |
| Negative affect | .077 | ** .142 | ** .153 |
| Positive affect | *.152 | (*).101 | ***.225 |
| Loneliness | ***.260 | ***.350 | ***.446 |
| Life satisfaction | ***.237 | ***.379 | ***.330 |

Table 3 reports spousal similarity among respondents of the Savings Suvey. The results are not entirely in line with the results among FSDP respondents. As in the FSDP dataset, similarity with regard to agreeableness is higher among respondents in the SS96 with vocational education and university graduates than among persons with lower levels of education. Among SS96 respondents with secondary education, however, similarity with regard to agreeableness is lower than among those with primary education only.

An anomaly to the hypothesis that similarity increases with education is that subjective happiness is more strongly correlated among spouses with primary education than among secondary or tertiary educated. Other unexpected findings are that neuroticism is negatively correlated among spouses with primary education only, and conscientiousness seems to be more strongly correlated among respondents with primary or secondary education.

Table 3. Spousal similarity by level of education completed (source: SS96)

| | Primary | Secondary | Tertiary |
|-------------------|----------------|------------------|-----------------|
| Agreeableness | ***.186 | ** .138 | ***.281 |
| Openness | .073 | .071 | .069 |
| Neuroticism | *-.192 | .004 | -.005 |
| Conscientiousness | .098 | ** .153 | -.039 |
| Extraversion | .092 | .028 | .017 |
| Happiness | ***.592 | ***.419 | ***.411 |

Children of parents who were affiliated with the same religion are married (or cohabitating) with spouses who have less similar personalities (see table 4). The strongest spousal personality similarity we find among children of parents who were not religious, or who were married with a person of a different religion.

The FSDP98 also asked whether respondents knew friends, and parents or siblings of their spouses when they got married. One would expect that people who know friends or relatives have more and more reliable information on the personality characteristics of the

future spouse. This is indeed the case: knowing friends or relatives of the spouse is associated with higher spousal personality similarity (see table 5).

Table 4. Spousal similarity by religious heterogamy of parents

| | Parents of both spouses same religion | Parents of one spouse different religion (or non religious) | Parents of both spouses different religion (or non religious) |
|------------------------------|--|--|--|
| Prosocial composite 1998 | .238 *** | .173 ** | .271 ** |
| Prosocial composite 2000 | .160 ** | .139 (*) | .226 * |
| Prosocial composite combined | .202 *** | .158 *** | .241 *** |
| Agreeableness | .233 *** | .108 * | .253 *** |
| Openness | .077 (*) | .085 (*) | .075 |
| Neuroticism | .026 | -.008 | .050 |
| Conscientiousness | -.002 | .046 | -.051 |
| Extraversion | .003 | .110 * | .034 |
| Social value orientation | .271 *** | .274 *** | .227 ** |
| Empathic concern | .168 *** | .162 * | .319 *** |
| Negative affect | .092 * | .173 ** | .138 |
| Positive affect | .146 ** | .224 *** | .197 * |
| Loneliness | .348 *** | .389 *** | .356 *** |
| Life satisfaction | .292 *** | .354 *** | .341 *** |

Table 5. Spousal similarity by contacts with parents/siblings and friends prior to marriage

| | Knew parents and siblings | | Knew friends | |
|--------------------------|----------------------------------|--------------------|---------------------|--------------------|
| | None | Some or all | None | Some or all |
| Prosocial composite 1998 | .175 *** | .286 *** | .180 *** | .316 *** |
| Agreeableness | .219 *** | .238 *** | .213 *** | .267 *** |
| Openness | .065 | .160 ** | .071 (*) | .166 * |
| Neuroticism | -.026 | .028 | .003 | -.039 |
| Conscientiousness | .054 | -.040 | .002 | .074 |
| Extraversion | -.017 | -.006 | -.001 | -.041 |
| Negative affect | .117 ** | .163 * | .139 *** | .101 (*) |
| Positive affect | .140 *** | .259 *** | .124 ** | .260 *** |
| Loneliness | .363 *** | .379 *** | .356 *** | .375 *** |
| Life satisfaction | .309 *** | .353 *** | .365 *** | .236 *** |

Further analyses

The analyses above are rather weak tests of our hypotheses. Differences in spousal similarity between levels of education are confounded with other factors, like length of marriage, religious origin, and to some extent with personality. More stringent tests can be conducted by regressing personality characteristics of one spouse on the score of the spouse, controlling for personality and length of marriage, and including interactions between the score of the spouse with education and religious heterogamy. Preliminary findings include: (a) the effects of education on similarity with regard to prosocial personality characteristics are only weakly significant in most cases; (b) effects of heterogamy are significant; (c) that similarity increases with length of marriage. It seems that increasing education and religious heterogamy do increase spousal similarity among couples.

References

- Alwin, Duane F. (1991). "Family of Origin and Cohort Differences in Verbal Ability." *American Sociological Review*, 56: 625-638.
- Amodio, David M. & Carolin J. Showers, 2005. "'Similarity breeds liking' revisited: the moderating role of commitment." *Journal of Social and Personal Relationships*, 22(6): 817-36.
- Bekkers, R. (2004). "Giving and volunteering in the Netherlands: Sociological and psychological perspectives". Dissertation Utrecht University.
- Botwin, M.D., Buss, D.M., & Shackelford, T.K. (1997). Personality and mate preferences: Five factors in mate selection and satisfaction. *Journal of Personality*. 65:1, 107-136.
- Bouchard, Geneviève & Julie-Eve Arseneault (2005). "Length of union as a moderator of the relationship between personality and dyadic adjustment." *Personality and Individual Differences*, 39: 1407-17.
- Burger, J.M., Soroka, S., Gonzago, K., Murphy, E. & E. Somervell (2001). "The Effect of Fleeting Attraction on Compliance to Requests." *Personality and Social Psychology Bulletin*, 27(12): 1578-86.
- Buss, D.M. (1984). Marital Assortment for Personality Dispositions: Assessment with Three Different Data Sources. *Behavior Genetics*, 14(2): 111-123.
- Buss, D.M. & Barnes, M. (1986). "Preferences in human mate selection". *Journal of Personality and Social Psychology*, 50: 559-570.
- Byrne, D. (1971). *The attraction paradigm*. New York: Academic Press.
- Byrne, D. (1997). An overview (and underview) of research and theory within the attraction paradigm. *Journal of Social & Personal Relationships*, 14, 417-431.
- Cialdini, Robert B. (2001). *Influence: Science and Practice*. Boston: Allyn & Bacon.
- Davis, M. H. (1994). *Empathy: A Social Psychological Approach*. Madison, WI: Brown & Benchmark.
- Denissen, J.J.A. (2005). *Understanding and Being Understood: The Impact of Intelligence and Dispositional Valuations on Social Relationships*. Dissertation, Humboldt University, Berlin.
- Donnellan, M. Brent, Conger, Rand D. & Bryant, Chalandra M. (2004). "The Big Five and enduring marriages". *Journal of Research in Personality*, 38: 481-504.
- Galbaud du Fort, G., Boothroyd, L.J., Bland, R.C., Newman, S.C. & Kakuma, R. (2002). "Spouse similarity for antisocial behaviour in the general population." *Psychological medicine*, 32: 1407-1416.

Gerris, J. R.M., Houtmans, M.J.M., Kwaaitaal-Roosen, E.M.G., Schipper, J.C., Vermulst, A.A. & J.M.A.M. Janssens (1998). *Parents, Adolescents and Young Adults in Dutch Families: A Longitudinal Study*. Nijmegen: Institute of Family Studies, University of Nijmegen.

Jockin, V., McGue, M. & Lykken, D.T. (1996). "Personality and Divorce: A Genetic Analysis". *Journal of Personality and Social Psychology*, 71(2): 288-299.

Kalmijn, M. & H. Flap. 2001. "Assortative Meeting and Mating: Unintended Consequences of Organized Settings for Partner Choices." *Social Forces*, 79:1289-1312.

Krueger, R.F., Moffitt, T.E., Caspi, A. Bleske, A. & Silva, P.A. (1998). "Assortative mating for antisocial behavior: developmental and methodological implications". *Behavioral Genetics*, 28(3):173-86.

Lijphart, A. J. (1975). *The Politics of Accommodation: Pluralism and Democracy in the Netherlands*. Berkeley/Los Angeles: University of California Press.

Mascie-Taylor, C.G.N. (1989). "Spouse similarity for IQ and Personality and Convergence." *Behavior Genetics*, 19(2): 223-227.

McPherson, Miller, Lynn Smith-Lovin and Cook, James M. 2001. "Birds of a feather: homophily in social networks." *Annual Review of Sociology*, 27:415-44.

Murray, S. L., Bellavia, G., Dolderman, D., Holmes, J.G., & Griffin, D. W. (2002). Kindred spirits? The benefits of egocentrism in close relationships. *Journal of Personality and Social Psychology*, 82, 563-581.

Nemeček, S. & Olson, K.R. (1999). "Five-Factor personality similarity and marital adjustment". *Social Behavior & Personality*, 27(3): 309-318.

Roberts, B. W., & DelVecchio, Wendy F. (2000). "The Rank-Order Consistency of Personality Traits From Childhood to Old Age: A Quantitative Review of Longitudinal Studies." *Psychological Bulletin*, 126(1), 3-25.

Robins, R.W., Caspi, A., & T.E. Moffitt (2002). "It's Not Just Who You're With, It's Who You Are: Personality and Relationship Experiences Across Multiple Relationships." *Journal of Personality*, 70(6): 925-64.

Todosijević, B., Ljubinković, S. & Arančić, A. (2003). Mate selection criteria: a trait desirability assessment study of sex differences in Serbia. *Evolutionary Psychology*, 1: 116-26.

Uunk, W.J.G. (1996). *Who Marries Whom? The Role of Social Origin, Education and High Culture in Mate Selection of Industrial Societies During the Twentieth Century*. Nijmegen: Dissertation, Department of Sociology, University of Nijmegen.

Van Lange, P. A. M., Otten, Wilma, De Bruin, Ellen M.N., & Joireman, Jeffrey A. (1997). Development of Prosocial, Individualistic and Competitive Orientations: Theory and Preliminary Evidence. *Journal Of Personality and Social Psychology*, 73(4), 733-746.

Völker, B. & H.D. Flap (1997), 'The comrades belief: Some Implications and Consequences - Neighborhood Relations in the former GDR', *European Sociological Review*, 3: 241-261.

Watson, D., Klohnen, E.C., Casillas, A., Nus Simms, E., Haig, J. & Berry, D.S. (2004). "Match makers and deal breakers: analyses of assortative mating in newlywed couples." *Journal of Personality*, 72(5): 1029-1068.

Appendix

Table A. Measures available in the Family Survey of the Dutch Population (FSDP) 2000, 1998 and the Dutch National Bank Panel Study (SS96)

| | FSDP00 | FSDP98 | SS96 |
|--|--------|--------|------|
| Level of education | X | X | X |
| Religious affiliation | X | X | |
| 30 item Big Five adjective checklist | X | X | |
| Cognitive ability (WORDSUM) | X | | |
| Interpersonal Reactivity Index (Davis, 1994) | X | | |
| Social value orientation | X | | |
| Satisfaction with life | | X | |
| PANAS | | X | |
| Loneliness | | X | |
| Goldberg 100 Big Five adjective checklist | | | X |
| Subjective happiness | | | X |

Table B. Correlations of level of education with personality characteristics

| | FSDP | SS96 |
|--------------------------|-----------|-----------|
| Openness | .180 *** | .044 * |
| Conscientiousness | -.018 | .051 * |
| Extraversion | .016 | -.029 |
| Agreeableness | .031 | -.035 (*) |
| Neuroticism | -.083 *** | -.046 * |
| Subjective happiness | .017 | -.017 |
| Social value orientation | -.087 ** | ----- |
| Empathic concern | .065 * | ----- |
| Positive affect | .170 *** | ----- |
| Negative affect | .013 | ----- |
| Loneliness | -.039 | ----- |