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Brief Report

Are parental personality traits a basis for mate selection?

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ABSTRACT

Both psychoanalytic views of attachment and evolutionary theories of imprinting suggest that mates may be preferentially chosen to resemble one's parents. Using data from a large Dutch study of twins and their families, we tested these hypotheses with regard to personality traits from the Five-Factor Model. Little evidence of parent/spouse similarity was found, although women did tend to select a husband who resembled their parents with regard to Openness to Experience. This effect may be due to the influence of Openness on their social worlds, rather than to their experiences in early childhood.

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1. Introduction

Studies of couples have generally shown that people tend to select partners who resemble them in personality traits, a phenomenon known as assortative mating. The effects, however, are usually quite small. For example, across the 30 facet scales of the Revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992), the median correlation between spouses in three cultures was .11 (McCrae et al., 2008). This very modest effect suggests that the choice of partners must have other determinants. Wealth, age, and physical attractiveness are doubtless important, but there are also other ways in which personality traits may affect mate selection. For example, Buss and Barnes (1986) showed that people value certain characteristics in prospective partners, especially traits related to Agreeableness and Conscientiousness.

Another, largely unexplored, possibility is that romantic attraction is strongly influenced by the personality traits of one's parents. Freud (1940/1963, p. 45) claimed that the relationship between mother and infant was "established unalterably for a whole lifetime as the . . . prototype of all later love-relations"—a view anticipated by Von Tilzer and Dillon's 1911 song, "I want a Girl (Just like the Girl that Married Dear Old Dad)." Bowlby (1969) subsequently developed Freud's idea in his theory of attachment, and contemporary attachment researchers appear to have adopted similar views. They argue that close relationships are guided by internal working models that were originally formed by the infant in interaction with caregivers. In adulthood, these models may be sustained, in part, by selecting romantic partners with traits similar to the caregivers':

"By choosing particular partners, individuals may find themselves in situations that confirm their relational expectations" (Feeney, 2008, p. 466). Because personality traits have an influence on interpersonal interactions, they should be particularly salient aspects of caregiver models.

A different mechanism has been proposed by evolutionary psychologists, who invoke the notion of imprinting, in which characteristics of the caregiver become the model for adult sexual mating preferences. Little, Penton-Voak, Burt, and Perrett (2003) found such an effect for hair and eye color, and Gyuris, Járai, and Bereczkei (2010) appear to be the first to have tested this idea with regard to personality traits. They assessed Big Five personality traits in a sample of 49 couples and their opposite-sex parents. Significant resemblance ($r = .25$) was found between wives and their mothers-in-law for the conscientiousness factor, suggesting that men select spouses similar to their mothers with respect to that trait. No other correlations were significant.

For heterosexual couples, the imprinting argument presumably applies only to opposite-sex parents (e.g., when a woman selects a husband who resembles her father), and Freud's dictum singles out the influence of the mother. But attachment researchers recognize that caregivers other than the mother can be the object of infant and child attachments (Howes & Speiker, 2008), and it is worthwhile to consider the hypothesis that people of both sexes also tend to select spouses that resemble their same-sex parent.

The present study examines these issues in a large Dutch sample. De Moor and colleagues (2011) assessed Big Five personality traits in a sample of twins and their family members. Parents and spouses of twins were included in the design, making it possible to examine correlations between personality traits in spouses and their in-laws of both sexes. Although twins are relatively rare, previous analyses have shown that with respect to personality, this

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Table 1
Correlations between personality traits of spouses and their parents-in-law.

Relationship	Personality trait				
	N	E	O	A	C
Wife/MIL	.01 (–.13, .16)	.01 (–.13, .14)	.11 (–.03, .24)	–.12 (–.25, .02)	.06 (–.08, .19)
Husband/FIL	.02 (–.09, .12)	.05 (–.08, .16)	.20 (.09, .30)	.05 (–.06, .16)	.06 (–.06, .17)
Wife/FIL	–.01 (–.15, .13)	.14 (.00, .28)	.11 (–.04, .25)	–.04 (–.18, .11)	.12 (–.03, .26)
Husband/MIL	.05 (–.06, .16)	–.02 (–.13, .09)	.18 (.08, .27)	.07 (–.05, .18)	.12 (.01, .22)

Note: 95% confidence intervals are given in parentheses. Significant correlations are in boldface. MIL = spouse's mother-in-law; FIL = spouse's father-in-law; N = Neuroticism; E = Extraversion; O = Openness to Experience; A = Agreeableness; C = Conscientiousness.

sample is reasonably representative of the general population (Dis-
tel, Ligthart, Willemsen, Nyholt, Trull, & Boomsma, 2007). How-
ever, because there are dependencies among these data (spouses
of both twins have the same in-laws), we used SEM analyses to
estimate correlations between spouses and their parents-in-law.
Each twin pair was split, and the correlations within each subsam-
ple were constrained to equality. This procedure avoids the prob-
lems of dependency.

2. Method

The Netherlands Twin Register is conducting a longitudinal sur-
vey of twins and their family members; data on trait heritability
(de Moor et al., 2011) and assortative mating (McCrae et al.,
2008) have already been published. In 2004 (survey 7) and in
2010/11 (survey 8) participants were administered the Dutch ver-
sion of the NEO Five-Factor Inventory (NEO-FFI; Hoekstra, Ormel, &
De Fruyt, 1996), which assesses Neuroticism, Extraversion, Open-
ness, Agreeableness, and Conscientiousness. The NEO-FFI contains
60 items (12 items per trait). Items were answered on a 5-point
Likert-type scale ranging from *strongly disagree* (coded 1) to
strongly agree (coded 5). Summed scores were computed for all five
personality traits (after reversing negatively keyed items). If 10 or
more items were missing, the summed scores for each trait were
not computed. If less than 10 items were missing, missing data
were imputed with the neutral option (replacing the missing value
by a code 3), as described in the Dutch manual (Hoekstra et al.,
1996). The Cronbach's alpha's for Neuroticism, Extraversion, Open-
ness to Experience, Agreeableness, and Conscientiousness in NTR
were, respectively, 0.86, 0.78, 0.69, 0.73 and 0.71. From the com-
bined data from survey 7 or 8, complete data were available for
191 wife/mother-in-law pairs, 281 husband/father-in-law pairs,
172 wife/father-in-law pairs, and 328 husband/mother-in-law
pairs (if participants had completed both surveys, we used data
from the first time they took the survey). Spouses ranged in age
from 21 to 55 years ($M = 32$, $SD = 5.5$); in-laws (i.e., parents) ranged
in age from 43 to 84 years ($M = 59$, $SD = 6.0$).

For each of the four relationships, maximum-likelihood esti-
mates of the correlation were obtained from specifying a struc-
tural-equation model (SEM) in Mx (Neale, Boker, Xie, & Maes,
2006).

3. Results and discussion

Table 1 summarizes results. Clearly, there is little evidence of
similarity between spouses and their parents-in-law: The median
correlation is .06, and only four correlations are statistically signifi-
cant. The top row of the table is most relevant to the Freudian
hypothesis that the mother becomes the prototype of the son's
subsequent love objects; none of these correlations is significant.
In particular, Gyuris and colleagues (2010) reported a significant
correlation between wives and mothers-in-law for Conscientious-
ness, but that finding is not replicated here. The top two rows of

the table test hypotheses about imprinting, but only one of the
10 correlations is significant, so imprinting on opposite-sex par-
ents' personality traits does not appear to be a general explanation
for mate selection.

Although modest in magnitude, the most consistent effects con-
cern Openness. Women preferentially select husbands who resem-
ble the women's parents—both mothers and fathers—in Openness.
The effects for men, though not significant, are in the same direc-
tion. It is difficult to explain this finding from the perspective of
early attachment. It seems odd to argue that infants are particu-
larly attuned to the experiential openness of their caregivers, but
are oblivious to their level of Neuroticism or Agreeableness. In-
stead, the result may be a stratification artifact: People tend to live
in social worlds (or strata) defined by similar political, religious,
and aesthetic views, and these are determined in part by Openness
(McCrae, 1996). For example, open parents might send their
daughters to liberal arts colleges, where they meet experientially
open husbands; closed parents might send their daughters to reli-
giously-oriented schools where they find more conservative mates.
Future research that includes detailed data on the history of the
marital relationship could test this hypothesis. Stratification arti-
facts are unlikely to explain the null findings for the other four
factors.

The present data shed some light on the nature of adult attach-
ment. Although many psychologists assume that romantic bonds
in adults are a more-or-less direct reflection of the attachment of
the infant to its caregivers (Kobak & Madsen, 2008), contemporary
attachment researchers have begun to emphasize the importance
of later experience with other adults and with peers. That view
of attachment as an evolving style is more consistent with the data
in Table 1, but it also begins to distance adult attachment from its
psychoanalytic roots, where the influence of early experience is
fundamental (Bornstein, Denckla, & Chung, in press). It is, of
course, possible that infant attachment guides mate selection with
regard to features (such as hair and eye color) other than personal-
ity traits.

Fraley and Tancredy (2012) have noted that MZ twins in partic-
ular have strong attachments to each other, and co-twins might be
hypothesized to serve as models for mate selection. However, pre-
liminary analyses of the present data do not support that view. For
example, for MZ twins, the correlation of co-twin's Neuroticism
with spouse's Neuroticism is .03 (cf. van Grootheest, van den Berg,
Cath, Willemsen, & Boomsma, 2008).

The present sample was relatively large, and a standard mea-
sure of the Big Five was used. But studies of assortative mating
(McCrae et al., 2008) suggest that some stronger associations
may be found at the level of more specific traits. Future research
on parent/spouse (or co-twin/spouse) similarity should employ
instruments that assess a range of facets of the Five-Factor Model.

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