MATE ASSORTMENT IN DATING AND MARRIED COUPLES

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Summary—Dating and married couples show comparable levels of assortment for physical traits. Married couples, however, are more assorted on psychological traits. It is argued that both dating and married couples initially assort on physical similarity, but that couples who are similar on psychological traits are more likely to marry. Physical traits are apparently critical in initial partner selection; psychological traits are more important for long-term relationships. There is little evidence that couples become more similar in psychological traits over time, implying that existing similarities are due to initial assortment. Copyright © 1996 Elsevier Science Ltd.

INTRODUCTION

Couples tend to assort on similar traits, but as a rule, do not become more similar over time (Buss, 1984; Eppstein & Guttman, 1984; Griffiths & Kunz, 1973; Mascie-Taylor, 1988; however, see Price & Vandenberg, 1980; Zajonc, Adelmann, Murphy & Niedenthal, 1987). Initial positive assortment (referred to here simply as assortment) and lack of convergence over time have led investigators to suggest that couples are assorting for gene similarity (Rushton, 1995; Thiessen & Gregg, 1980). The biological advantages of assortment for similar genes are varied, perhaps increasing inclusive fitness (Rushton, 1995; Thiessen & Gregg, 1980) and facilitating communication (Thiessen, 1993, 1995).

Assortment is broadly trait-specific and correlated with variations in heritability (Thiessen & Gregg, 1980). Couples tend to correlate highly on age (0.85; Susanne & Lepage, 1988), demographic and socioeconomic parameters (0.40–0.70; Lykken & Tellegen, 1993) and intellectual measures (0.40–0.60; Jensen, 1988). Couples correlate to a lesser extent on personality measures (0.25; Mascie-Taylor & Vandenberg, 1988), and on physical attributes (0.00–0.30; Spuhler, 1968). These differences suggest a range of gene–environment interactions.

Most studies, including those reported here, rely heavily on spousal correlations, leaving open the question of differences in assortment between dating and married couples (Vandenberg, 1972). Are dating and mating couples similarly assorted, do they become more alike over time, or do they apply different criteria in mate choices? According to Jaffe and Chacon-Puignau (1995) female selection for mates with better education is higher among married couples. On the other hand, unmarried males in the upper percentiles of education and occupation select younger females compared with males from lower percentiles. Zajonc and his colleagues (1987) found that subjects judged the similarity of pictures of couples living together for 25 yr higher than pictures of the same couples when they were first married. The conclusion was that couples converge in physical traits over time. This unusual outcome is not in accord with similar studies by Griffiths and Kunz (1975) or more recent studies by Hinsz (1989). The unusual finding by Zajonc et al., may not illustrate convergence at all, but rather an exaggeration of common traits over time. In any case, assortment generally occurs early in a relationship and does not seem to vary over time.

Our initial hypothesis was that dating couples would assort more strongly on physical traits, because dating often implies short-term hedonistic relations. Married couples, on the other hand, may assort more strongly on psychological traits because of their value for long-term relations (see Buss & Schmitt, 1993, for a discussion of short vs long-term mating strategies).

The data we report here agree with the initial hypothesis with a slight variation. Dating couples were found to be only slightly more assorted than married couples on physical traits. The salient difference between the two groups was among the psychological factors, in which the married
couples were much more homogamous than the dating couples. Thus, it appears that all couples initially select on physical similarity, but that short-term dating relationships do not mature into married relationships unless the couples also share psychological similarity.

**METHOD**

**Subjects**

Ninety-eight individuals, composed of 23 dating couples and 26 married couples served as subjects. The average length of relationships was 1.15 yr for dating couples and 6.93 yr for married couples.

Potential partners were obtained through advertisements in the personal sections of city or university newspapers. The adverts asked for volunteers for a research project on "...similarities and differences among dating and married couples." The respondents were requested to call a phone number, leaving their names and addresses on an answering machine. Investigators sent each couple a test packet, consisting of two *Study on Partner Characteristics* questionnaires (described below), two consent forms, a measuring tape, and a self-addressed stamped envelope (SASE). The couples were requested to return the questionnaires and both consent forms in the SASE.

Fifty-six test packets were mailed to dating couples, with a return of 41%, and 46 packets were mailed to married couples, with a return of 57%. Debriefing forms, describing the outcome of the experiment, were eventually sent to couples participating in the study.

**Survey questionnaire**

Demographic and personal information on individuals of each couple was obtained on the questionnaire, *Study on Partner Characteristics*. Participants were asked to complete the questionnaire independently of their partners.

There were four sections to the questionnaire. Part One, subtitles 'General Information', asked five general questions (e.g. length of close relationship, dating or married). Part Two, subtitled 'Physical Traits', had 13 questions on physical characteristics, (e.g. age and height). Directions on how to take the measurements accompanied a bodily diagram. Part Three, subtitled 'What you look for in a partner', had five questions, assessing how important particular partner traits were to the respondents, such as 'Importance of an Attractive Face', and 'Importance of Intelligence'. Respondents circled their choice on a five-point scale, ranging from one (far below average) to five (far above average). Two of these questions assessed physical preferences (face and body), three assessed psychological preferences (intelligence, good personality and loyalty). Part Four, subtitled 'Comparing Yourself and Your Partner', consisted of 46 questions. The same five-point scale was used as in Part Three. This time, however, respondents rated themselves and their partners on physical and psychological traits possessed, not on those preferred (for a complete list of physical and psychological traits assessed, see Table 1).

**RESULTS**

A form of inter-rater agreement was calculated by correlating the self-rating of one partner to the partner-rating of the other. This measure gives the amount of agreement between the two partners on some trait possessed by one of them. The married couples' average partner–self correlation was \( r = 0.45 \) while the dating couples' average partner–self correlation was \( r = 0.20 \). This difference was highly significant \( [F(1,54) = 16.64, P = 0.0001] \), indicating that couples staying together for longer periods of time show more agreement on traits possessed. Furthermore, when the male was self-rating and the female was rating the male, their average agreement was \( r = 0.40 \). Most of the 14 correlations (12 psychological plus two physical) were significantly different from zero \( (P < 0.001) \). Only the correlation for emotional similarity \( (r = 0.25, P = 0.08) \), was not significant. By corollary, when the female was self-rating and the male was rating the female, their average agreement was \( r = 0.31 \). Nine of these 14 correlations were significant. Evidently, males and females agreed with the self-ratings of their partner.

The primary concern of the study was to evaluate any physical or psychological differences in the correlations for dating and married couples. It was predicted that correlations for dating couples
Mate assortment in dating and married couples

Table 1. Correlations of married and dating couples and z-score difference

<table>
<thead>
<tr>
<th>Physical</th>
<th>r = married</th>
<th>P value</th>
<th>r-dating</th>
<th>P value</th>
<th>z-score difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.86*</td>
<td>0.0001</td>
<td>0.40</td>
<td>0.06</td>
<td>2.84*</td>
</tr>
<tr>
<td>Weight</td>
<td>0.20</td>
<td>0.33</td>
<td>0.04</td>
<td>0.85</td>
<td>-0.78</td>
</tr>
<tr>
<td>Height</td>
<td>0.00</td>
<td>0.97</td>
<td>0.24</td>
<td>0.28</td>
<td>-0.81</td>
</tr>
<tr>
<td>Shoe size</td>
<td>0.15</td>
<td>0.47</td>
<td>0.27</td>
<td>0.20</td>
<td>-0.42</td>
</tr>
<tr>
<td>Body mass index</td>
<td>-0.15</td>
<td>0.44</td>
<td>0.17</td>
<td>0.45</td>
<td>-1.04</td>
</tr>
<tr>
<td>Waist—hip ratio</td>
<td>0.48*</td>
<td>0.02</td>
<td>0.10</td>
<td>0.66</td>
<td>1.36</td>
</tr>
<tr>
<td>Arm length</td>
<td>0.30</td>
<td>0.14</td>
<td>0.23</td>
<td>0.30</td>
<td>0.26</td>
</tr>
<tr>
<td>Leg length</td>
<td>-0.16</td>
<td>0.43</td>
<td>0.39</td>
<td>0.06</td>
<td>-1.86</td>
</tr>
<tr>
<td>Head circumference</td>
<td>-0.07</td>
<td>0.72</td>
<td>0.45*</td>
<td>0.03</td>
<td>-1.79</td>
</tr>
<tr>
<td>Facial attractiveness†</td>
<td>0.06</td>
<td>0.75</td>
<td>0.37</td>
<td>0.08</td>
<td>1.47</td>
</tr>
<tr>
<td>Bodily attractiveness‡</td>
<td>0.11</td>
<td>0.42</td>
<td>0.28</td>
<td>0.20</td>
<td>-0.39</td>
</tr>
</tbody>
</table>

Psychological‡

<table>
<thead>
<tr>
<th></th>
<th>r = married</th>
<th>P value</th>
<th>r-dating</th>
<th>P value</th>
<th>z-score difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humor</td>
<td>0.24</td>
<td>0.24</td>
<td>0.20</td>
<td>0.34</td>
<td>0.16</td>
</tr>
<tr>
<td>Imaginativeness</td>
<td>0.40*</td>
<td>0.04</td>
<td>-0.49*</td>
<td>0.02</td>
<td>3.14*</td>
</tr>
<tr>
<td>Jealousy</td>
<td>0.28</td>
<td>0.16</td>
<td>0.36</td>
<td>0.24</td>
<td>0.07</td>
</tr>
<tr>
<td>Aggressiveness</td>
<td>0.17</td>
<td>0.42</td>
<td>0.57*</td>
<td>0.001</td>
<td>-1.57</td>
</tr>
<tr>
<td>Intelligence</td>
<td>0.47*</td>
<td>0.01</td>
<td>-0.24</td>
<td>0.26</td>
<td>2.48*</td>
</tr>
<tr>
<td>Emotionality</td>
<td>-0.03</td>
<td>0.89</td>
<td>-0.48*</td>
<td>0.02</td>
<td>1.78</td>
</tr>
<tr>
<td>Loyalty</td>
<td>0.30</td>
<td>0.13</td>
<td>-0.08</td>
<td>0.70</td>
<td>1.27</td>
</tr>
<tr>
<td>Happiness</td>
<td>0.34</td>
<td>0.09</td>
<td>-0.24</td>
<td>0.27</td>
<td>1.96*</td>
</tr>
<tr>
<td>Psychological stability</td>
<td>0.27</td>
<td>0.19</td>
<td>0.05</td>
<td>0.03</td>
<td>0.75</td>
</tr>
<tr>
<td>Extraversion</td>
<td>-0.29</td>
<td>0.14</td>
<td>-0.62*</td>
<td>0.001</td>
<td>1.41</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>0.00</td>
<td>0.98</td>
<td>-0.14</td>
<td>0.53</td>
<td>0.46</td>
</tr>
<tr>
<td>Paranoia</td>
<td>0.11</td>
<td>0.60</td>
<td>-0.05</td>
<td>0.82</td>
<td>0.52</td>
</tr>
</tbody>
</table>

* P < 0.05.
† assessed by five-point rating scale.
‡ data not used in ANOVA's.

would be higher than correlations for married couples among physical traits, but that the opposite would hold true among psychological traits. Among physical characteristics, the correlations were calculated by comparing the measurements of one partner to the measurements of the other. The traits requiring assessment on the five-point scale were correlated by comparing the self-rating of one partner to the self-rating of the other. Differences between the correlations expresses as z scores are shown in Table 1. Positive z scores indicate that correlations for married couples are higher than for dating couples (a z of 1.96 is needed for statistical significance at the 0.05 level). For the physical characteristics, the correlation for dating couples were slightly higher than correlations of married couples (seven out of 11). Among the psychological variables, the correlations for married couples were higher than the dating couples (11 out of 12). Correlations were significantly higher for married couples on three variables; intelligence, imagination and happiness.

A chi-square was run to determine if the proportion of correlations higher for married differed from those which were higher for dating. The data were categorized as being either married correlations higher (more positive) than dating correlations (M > D), or dating higher than married (D > M). The data were placed into a two by two matrix, with trait type (physical/psychological) along one axis and correlation type (M > D/D > M) along the other. A highly significant interaction was found, $\chi^2 (df = 1) = 7.74, P < 0.01$, indicating that while married and dating couples were roughly similar on the number of physical correlations, there were many (11 to one) more M > D correlations among psychological variables.

The same effect was found when the magnitude of each correlation was taken into account instead of the data simply being categorized as higher or lower. A 2 x 2 between (trait type)-within (dating/married) design ANOVA was run to test the same effect. To have equal groups of 11 physical and 11 psychological traits, the humor correlation was dropped because it is, of all the correlations, most likely to tap into another already on the list (happiness).

In agreement with the chi-square results, a significant interaction between trait type and couples status was found, $F(1,20) = 6.25, P < 0.05$. This effect is illustrated in Fig. 1, and was due mainly to a large difference between dating and married correlations on psychological traits $F(1,10) = 8.87, P = 0.02$. Among physical variables, the dating correlations did not significantly differ from married correlations, $F(1,10) = 0.40, ns$, although the data indicate a trend that dating couples are slightly more homogamous on physical traits.

These differential correlations do not occur because dating and married couples differ in their
preference for physical or psychological similarity. The average preference for traits in the other sex was equally high for all groups (~4.25 on a five-point scale). It appears that individuals typically prefer high similarity in their partners, but in reality differ according to their dating or marital status.

DISCUSSION

Dating and married couples show approximately equal levels of assortment on physical traits, demonstrating a low to moderate level of assortment for both groups (Fig. 1). For psychological variables, however, married couples show higher levels of assortment.

These differences might suggest that couples become more similar in psychological traits over time. The average length of relationship for married couples was 6.93 yr, and for dating couples it was only 1.15 yr. This six-fold difference in time spent together could account for the greater similarity among married couples in psychological traits, especially if psychological traits are more malleable.

However, there is almost no evidence that couples converge in psychological similarity over time (Buss, 1984; Griffiths & Kunz, 1973; Mascie-Taylor, 1988; Thiessen & Gregg, 1980). People initially assort on similarity; they do not become more similar. The stronger hypothesis, then, is that couples first assort on physical traits, but only stay together and marry if they also are similar on psychological variables. This explanation is consistent with data that indicate marital instability in couples who are not assorted highly on personality traits (Cattell & Nesselroade, 1967), and with findings of early dating couple dissolutions which tend to be assorted weakly on physical and psychological traits (Hill, Zick & Peplau, 1976).

Thus, it seems that the first criterion for mate attraction is physical, as if nothing else matters if this criterion is not met. Given physical assortment, couples then remain together to the degree that they share psychological traits. It is not so much that people apply short-term or long-term strategies, as Buss and Schmitt (1993) suggest, but that they always apply long-term strategies that may or may not turn out to be successful in the short-term; success is filtered initially through physical similarity, but rises or falls on psychological similarities.

The current study has opened the following possibilities for future research:

(1) A comparison of ex-dating couples to continuing dating couples, or a comparison of ex-married couples to current married couples, might find great differences in the degree of psychological assortment. Partnerships which break up should on the average have lower psychological but equal physical assortment.

(2) Among couples discrepant in psychological traits, it is expected that there be more physical assortment (implying a trade-off), and vice versa for discrepancies of physical traits.
A measure of initial attraction to someone should be correlated to how similar they are physically to that person, while a measure of long-term commitment should be correlated to how similar the two people are psychologically.

Mate choice is not a random roll of the dice, nor is it the search for the universal signs of beauty upon which everyone agrees. There is, as the maxim goes, 'a lid for every pot.' Aside from searching for those signs which everyone finds attractive, each individual is also searching for his or her own version of that perfection. That person is the one who is most like themselves. With intangible traits, it often takes time to realize whether or not such a similarity exists.

REFERENCES


