

Consistency between individuals' past and current romantic partners' own reports of their personalities

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Do people have a "type" when it comes to their romantic partners' personalities? In the present research, we used data from a 9-y longitudinal study in Germany and examined the similarity between an individual's ex- and current partners using the partners' self-reported personality profiles. Based on the social accuracy model, our analyses distinguished similarity between partners that was attributable to similarity to an average person (normative similarity) and resemblance to the target participant himself/herself (selfpartner similarity) to more precisely examine similarity from partner to partner (distinctive similarity). The results revealed a significant degree of distinctive partner similarity, suggesting that there may indeed be a unique type of person each individual ends up with. We also found that distinctive partner similarity was weaker for people high in extraversion or openness to experience, suggesting that these individuals may be less likely to be in a relationship with someone similar to their ex-partner (although the individual difference effects were not mirrored in an alternative analytic approach). These findings provide evidence for stability in distinctive partner personality and have important implications for predicting future partnering behaviors and actions in romantic relationships.

partner personality | partnering patterns | romantic relationships

iven the significant consequences romantic relationships can have for people's well-being (1, 2), researchers from different theoretical perspectives (3, 4) have long been interested in understanding why people end up with the particular romantic partners that they do. However, one aspect of finding a partner that researchers have largely overlooked is consistency or inconsistency in the type of person people couple with. On the one hand, people searching for a partner are often in that position because their previous partner turned out to be unsatisfying, and thus, they may be inclined to start a relationship with someone different. On the other hand, popular culture often suggests that people have a particular "type" when it comes to their partners' personalities, alluding to some consistency in what their partners are like from one relationship to the next. Thus, how similar is an individual's new partner to their ex-partner? Are certain types of people less likely to show stability in the type of person they couple with such as people who are drawn to seek out new types of relationship experiences and/or who have a more heterogeneous pool of partners available? To address these questions, we used data from a 9-y longitudinal study of romantic dyads and examined the similarity between an individual's ex- and current partners using reports from the partners themselves.

Stability in Partnering Patterns

People tend to believe their preferences for particular partner personality characteristics change over time (5), but studies assessing personality preferences at multiple time points have shown a significant degree of stability. For example, the standards people have for a potential partner (6) and even specific descriptions of an ideal partner's personality (7) tend to remain relatively stable. However, there are reasons to doubt that results from the

existing partner preference literature can provide conclusive evidence for stability in actual partner personality. First, studies tracking changes in partner preferences typically do not include or focus on participants who transition between relationships during the study. This is an important limitation as people would seem most likely to adjust their partner preferences as they move from one relationship to another-when they have both relevant information and motivation to update their preferences (8). If participants remained coupled during a study period, their motivation to feel a sense of conviction about their existing partner may prevent them from changing their partner preferences; if participants remained single, there may not be impetus for them to change their preferences as they are unlikely to have gained information about the consequences of being with different partners (9).

Second, the degree to which findings on partner preferences can speak to actual partnering patterns is unclear as what people state as their preferences for partners and for many other domains are weak predictors of revealed behavior (9–11). Further, relying solely on one person's self-reports, as is the case in the preference literature, can be inherently problematic as it is subject to different biases. For example, the way people describe their current partner is likely to reflect what they want from the partner and their relationship (motivated cognition; ref. 12). As such, relying on one person's self-reports, as in previous research (13), may not be a reliable way to get information about their partner. Rather, direct assessments of different partners people have actually dated and assessments from multiple sources (particularly the partners themselves) are required to adequately address the question of partner consistency.

To the best of our knowledge, there has been one published study where data from both target individuals and multiple of

Significance

Although a romantic partner's personality creates an interpersonal environment that can be highly consequential for emotional and physical well-being, little research has examined to what degree romantic partners' personalities are similar across relationships. In this study, we provide evidence of stability in partner personality, implementing a rigorous analysis using selfreports of personalities from both past and current partners themselves. The significant degree of unique similarity between an individual's past and current partners could not be explained by important potential confounds. Our results also provided tentative evidence that this similarity is weaker for people who are more extraverted or open to experience.

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that person's partners were used to examine the similarity between partner traits across relationships. In Eastwick et al.'s study (14), researchers examined the extent to which an individual's partners "cluster" (i.e., are more similar to one another than would be expected by chance) in terms of physical (e.g., attractiveness; study 1) and nonphysical (e.g., religiosity; study 2) traits. For each trait, intraclass correlations were calculated to capture the degree to which an individual's partners shared similarities. The results showed significant clustering among the partners with respect to the physical traits and some of the nonphysical traits. Of course, clustering could be a result of active choices on the part of the self, of encountering environments with similar people as potential partners, of being chosen as a partner by similar people, or of some combination of these or other factors. In Eastwick et al.'s study, the clustering pattern appeared to be mostly attributable to the partners sharing environments (e.g., Catholics belonging to the same congregation) that made it more likely that 2 people would have the opportunity to meet.

If any instability does exist in the partner preference aspect of relationship initiation, it seems likely that it will lie in a domain that provides sensible attributions for why a previous relationship was not successful (e.g., what people have learned to avoid). Although attractiveness or religiosity (14) may sometimes be such a domain, a more common attribution for relationship failure comes from the suitability of a partner's personality. For example, people who are contemplating breakups commonly identify the partner's personality as an important reason that they are considering ending the relationship (15). Thus, if there is a discrepancy in partner characteristics from one relationship to the next, it would seem that starting relationships with partners who differ from expartners in terms of personality may be a common dynamic that could lead to such instability. That is, partner personality appears to be one domain in which people hold a narrative that inconsistency from one partner to the next is sometimes desirable (16), making partner personality an important candidate to examine in terms of stability across relationships.

The Present Research

In the present research, we examined stability in partner personality using partners' self-reported personality profiles. Although there are different ways to address the question of similarity, we used correspondence between an individual's ex- and current partners' self-descriptions on 21 items (e.g., "I trust others easily") as an index of similarity between the 2 partners (see refs. 17 and 18). This analysis puts the emphasis on overall personality patterns rather than similarity in specific individual traits. Thus, higher similarity scores reflect the tendency for ex- and current partners to covary across their multiple traits (e.g., how trusting and imaginative but not critical or organized one is).

This analytic approach also allows us to separate out 2 potential factors that may be contributing to the similarity between current and ex-partners, thereby providing a conservative test of similarity. First, we can account for the effects of normative similarity—similarity in the 2 partners' self-descriptions as a reflection of how people describe themselves in general (which is likely to be positive in nature; ref. 19). That is, 2 partners might appear similar, but this could be because of normative tendencies to give oneself positive ratings rather than because of unique similarity between partners. Second, we can account for the effects of self-partner similarity—that is, similarity in the 2 partners' selfdescriptions as a reflection of each partner's similarity to the participant. Given the well-established effect of assortative mating (4), it is plausible that when moving from an ex- to a current partner, an individual's 2 relationship partners will resemble one another to the extent that each resembles the target person. In other words, there may be similarity between an ex- and current partner that is attributable to people's consistent tendency to date someone similar to the self. In our analyses, we examined if the

current partner's profile bears a unique similarity to the expartner's (i.e., distinctive similarity), controlling for the extent to which it is normative and is similar to the participant's profile. Additionally, based on literature suggesting that personality influences partnering patterns (20, 21), we explored the question of who is more or less likely to be dating a partner similar to their ex-partner by examining the link between participants' Big Five personality traits and each similarity index (i.e., normative, selfpartner, and distinctive similarity indices).

Results

We used multilevel modeling to examine similarity in ex- and current partners' personality profiles (i.e., correspondence in self-descriptions across the 21 items). This approach allows us to estimate normative and self-partner similarity along with distinctive partner similarity. All analyses were conducted in R using the lme4 package (22).

To isolate distinctive partner similarity, we examined a model with 3 profiles entered as simultaneous predictors of a current partner's profile (see refs. 23 and 24 for a similar approach). First, we included the normative profile, which was an average profile of all of the partners; the slope of the normative profile indicates the degree to which a current partner's profile corresponds to (i.e., is similar to) an average person's profile. Because people in general evaluate themselves in a socially desirable way, this may be interpreted as positive in valence (23). Second, the distinctive self-profile, which was computed by subtracting the normative mean of each item from the participant's raw profile, was included in the model. The slope of the distinctive selfprofile reflects the degree to which a current partner's profile is similar to the participant's own unique profile—what makes the participant different from an average person. Last, and most importantly, we included the distinctive ex-partner profile, which was computed by subtracting the normative mean of each item from an ex-partner's raw profile. The slope of the distinctive expartner profile indicates the extent to which a current partner's profile corresponds to an ex-partner's unique profile—what makes the ex-partner different from an average person.

The results showed that there was a significant level of normative similarity, b = 0.53, SE = 0.03, P < 0.001, indicating that current partners indeed described themselves as an average person does. There was also a significant level of self-partner similarity, b = 0.20, SE = 0.02, P < 0.001, indicating that current partners described themselves in a way that reflects the participant's unique personalities, which may be interpreted as a reflection of people's assortative mating tendencies. Most critically, however, there was a significant level of distinctive partner similarity, b = 0.22, SE = 0.02, P < 0.001, indicating that a current partner's profile reflected the ex-partner's unique personality. An individual's current partner was similar to their ex-partner in a way different from an average person, and this similarity held above and beyond their similarity to the participant. This provides evidence that there is a distinctive pattern of partner personalities consistent across relationships that cannot be attributed to normativeness or assortative mating patterns.*

Analyses Using a Within-Person Correlation Approach. Given that there are different methods researchers have used to address the question of similarity, we also examined our key question with an alternative approach for calculating a within-person correlation (19). This approach also allowed us to estimate distinctive similarity with the normativeness taken into account by correlating the 2 partners' profiles after subtracting the normative profile

^{*}We also examined if any of the similarity indices were moderated by the length of time between the 2 partners' reports (i.e., the number of years between the 2 reports), but there was no significant effect.

from each. The Multicon package in R (25) was used for this analytic technique. Consistent with our primary analyses, the results showed a significant degree of overall similarity, $\bar{q} = 0.30$, t(319) = 15.72, P < 0.001, and, more importantly, distinctive similarity, $\bar{q} = 0.08$, t(319) = 4.43, P < 0.001. Note, however, that this method of accounting for distinctive similarity is conceptually different from the one implemented in our primary analyses in that it does not separate out the degree to which a current partner is similar to the participant (self-partner similarity).

Individual Differences Associated with Partner Similarity. Next, we examined if there are individual differences associated with having a partner who bears greater distinctive similarity to an expartner. To address this question using multilevel modeling, we grand mean centered participants' Big Five personality traits and entered them as a cross-level moderator of each slope (i.e., level 2 predictors of the similarity slopes) one at a time. A significant interaction term indicates that the similarity index is significantly associated with the Big Five trait. As in previous research (23, 24), we use the term "associated" or "linked" instead of "moderated" when describing the moderation analyses below to help understand the results.

Results for all personality traits are presented in Table 1. First, there was a significant link between neuroticism and normative similarity, such that current partners of more neurotic individuals described themselves in a less normative (or socially desirable) way. Second, extraversion, openness to experience, and agreeableness were positively linked with self-partner similarity. That is, individuals high in these traits were dating a partner who was more distinctively similar to themselves. In contrast, neuroticism was negatively linked with self-partner similarity, suggesting that more neurotic individuals were dating a partner less similar to themselves. Last, extraversion and openness to experience were negatively associated with distinctive partner similarity. That is, individuals high in extraversion or openness were less likely to be dating a partner who was distinctively similar to their ex-partner. Or phrased differently, they were dating a partner more different from their ex-partner.

Next, we examined individual differences associated with partner similarity using a within-person correlation approach. Table 2 shows that individuals higher in agreeableness or lower in neuroticism had partners whose overall personality was more similar to their ex-partners. However, when the normative aspect was accounted for, none of the individual's Big Five traits were related to distinctive similarity. Possibly, extraversion and openness to experience were not associated with distinctive similarity as conceptualized here because the partner's similarity to participants themselves (which was significantly linked with both traits in our primary analyses; see Table 1) has not been factored out.

Discussion

After experiencing a breakup, people commonly believe that they have better ideas about whom they want as a new partner (16, 26). However, the present findings provide evidence that people's new partners tend to have a degree of similarity to their previous partners, suggesting that people consistently engage in relationships with a particular type of person to at least some extent. This appears to be less true of individuals high in extraversion or openness to experience, although these conclusions remain tentative.

The present findings provide several novel contributions to our current understanding of partnering patterns. First, the distinctive similarity between an individual's 2 partners we found offers direct evidence for an idiosyncratic "type" when it comes to personality. Although the idea that there is both shared consensus and unique idiosyncrasy in what people want in a romantic partner is not new (7), our data show stability in distinctive partner personality through actual relationship formation and, importantly, using 2 different partners' own self-reports. This allows us to bypass retrospective biases that may be present in describing past partners (13). Further, our data suggest that the stability in partner personality evidenced in our data was something more than people meeting someone similar to themselves.

It is particularly noteworthy that we found partner similarity above and beyond the similarity to the self as it may help us to address some questions regarding the mechanisms underlying our findings. As noted, our data do not make clear why people's partners exhibit similar personalities. One possible explanation is that people consistently inhabit environments with others of a particular personality, and thus, consistent partner personality may reflect selecting from these consistent environments (e.g., working with fellow tour guides leads to consistently dating extraverted individuals). However, note that this hypothesis suggests that the self should also share the personality characteristic common in this environment (extraversion in this case), which should have been accounted for in our analyses controlling for self-partner similarity. This suggests that the partner personality consistency evidenced in our data may be better attributed to more active forces such as choosing (or being chosen by) partners with particular personalities. Of course, the possibility of contextual effects cannot by any means be ruled out with the current data, and future studies should examine both active and passive forces in a more precise and direct way.

Our results also suggest that partnering patterns may be more predictable than might be expected from some previous findings. For example, a recent study by Joel et al. (27) showed that no combination of more than 100 self-reported traits and preferences could predict who feels particularly strong romantic desire toward whom in a speed dating setting. Our findings add to the literature by suggesting that predicting who ultimately ends up in a relationship with whom (which is, indeed, a different question than who desires whom; ref. 27) may become more viable if information

Table 1. Associations between similarity and Big Five personality traits (multilevel model analyses)

	Extraversion			Openness			Agreeableness			Conscientiousness			Neuroticism		
Similarity index	b (SE)	Ρ	d	b (SE)	Р	d	b (SE)	P	d	b (SE)	Р	d	b (SE)	Р	d
Normative similarity	-0.01 (0.04)	0.85	-0.04	-0.002 (0.05)	0.97	-0.01	0.01 (0.04)	0.83	0.04	-0.05 (0.05)	0.28	-0.23	-0.08 (0.04)	0.05	-0.40
Self-partner similarity	0.06 (0.02)	0.003	0.46	0.08 (0.02)	<0.001	0.52	0.05 (0.02)	0.02	0.36	0.04 (0.02)	0.10	0.24	-0.05 (0.02)	0.01	-0.38
Distinctive similarity	-0.05 (0.02)	0.02	-0.37	-0.05 (0.02)	0.03	-0.36	0.02 (0.02)	0.30	0.17	-0.03 (0.02)	0.26	-0.18	-0.003 (0.02)	0.88	-0.02

The coefficients correspond to cross-level interaction effects and indicate the associations between each similarity slope and participants' Big Five traits. Standardized effect sizes were computed using the formula $d = \frac{2b5D_x}{5D_y}$, where b is the unstandardized fixed effect, SD_x is the SD for the personality variable, and SD_y is the random effect SD for the similarity index (see refs. 40 and 41; estimates represent effect sizes equivalent to a Cohen's d with binary inputs).

Park and MacDonald PNAS Latest Articles | 3 of 5

Table 2. Associations between similarity and Big Five personality traits (profile correlation analyses)*

Extraversion			Openness			Agreeableness			Conscientiousness			Neuroticism			
Similarity index	r	Р	d	r	Р	d	r	Р	d	r	Р	d	r	Р	d
Overall similarity	-0.05	0.42	-0.10	0.004	0.94	0.01	0.12	0.04	0.24	0.002	0.97	0.004	-0.12	0.03	-0.24
Distinctive similarity	-0.05	0.40	-0.10	0.03	0.64	0.06	0.04	0.48	0.08	-0.01	-0.79	0.02	-0.02	0.70	-0.04

The coefficients correspond to Pearson's correlations between each similarity slope and participants' Big Five traits. Cohen's *d* is presented for comparison purposes. Distinctive similarity here captures the degree to which 2 profiles are similar in ways that differ from an average profile (i.e., factoring out normativeness). However, the degree to which a current partner profile is similar to the self-profile (i.e., corresponding to self-partner similarity in Table 1) is not taken into account.

about the participants' past partners is added. In fact, a similar approach is widely used in recommendation systems in which algorithms use people's preferences inferred from their past choices to generate recommendations (28, 29). For example, we can extract different acoustic features of the songs people have included in their playlists and use that information to make personalized recommendations (i.e., attempts to predict songs that they are going to like). Similar "content-based" recommendation systems may well have value in the domain of online dating. Of course, by implementing a speed dating paradigm in which all participants meet each other, Joel et al.'s results can best be attributed to participant choices rather than which participants happened to meet each other (i.e., environment effects). Thus, past partner personalities would likely only provide predictive power in a speed dating study like Joel et al.'s if partner personality consistency is a result of actively choosing particular personalities rather than being in environments in which particular personalities are more prevalent.

The similarity in partner personality demonstrated in these data also has interesting implications for the maintenance of a new relationship. On the one hand, research in the remarriage literature has shown that when remarried individuals discover a parallel in the former and new spouses' (negative) behaviors, they are likely to feel hopeless or anxious (30, 31) and be unwilling to tolerate it (32). On the other hand, there may be relational benefits from having a partner resembling an ex-partner such as positive interaction patterns or prorelationship behaviors in the previous relationship that can be easily implemented in the new one. Similarly, the sense of familiarity from the new partner can facilitate self-disclosure and thus the couples' bonding processes (33). Accordingly, future studies should examine both positive and negative implications of dating partners with similar personalities in the way the new relationships unfold.

Last, our findings on individual differences associated with partner similarity provide a more nuanced understanding of the partnering patterns. Notably, the results were different depending on the analytic approach (and, importantly, whether distinctive similarity was separated from self-partner similarity). However, the significant individual difference effects were obtained from the arguably more conservative approach where people's tendency to meet someone similar to themselves was controlled for. Specifically, we found that people higher in extraversion or openness to experience were less likely to be in a relationship with a partner distinctively similar to their ex-partner. To the extent that individuals higher in extraversion and, particularly, openness tend to seek sensation and novel experiences (34), our effects may be a reflection of their pursuit of novelty regarding partner personality types. At the same time, extraversion and openness to experience tend to predict more heterogeneous social networks and thus a wider pool of potential partners (35). From this perspective, our findings are consistent with the idea that partner personality consistency may be tied to the diversity of personalities in one's environment and thus may not reflect active choice processes. Given that our examination of the personality effects was exploratory, future research needs to replicate and extend these findings.

Conclusion

Romantic partnering is a behavior that comes with serious consequences (1) and is something that a vast majority of people will experience multiple times in their lives (36). The present study contributes to the current literature by identifying a pattern of consistency across partner personalities and providing evidence for individuals' tendency to be drawn into relationships with a particular type of person, albeit with possible individual differences in the extent of the phenomenon. This partner personality consistency can have potential implications for predicting with whom people are likely to couple in the future as well as how they will behave in relationships. Future research on what drives this consistency will be essential to help translate these results into a practical tool (e.g., matching algorithm) or practices and education aimed at improving romantic relationships.

Method

We used data from the German Family Panel study (release 9.1), which is an ongoing longitudinal study on couple and family dynamics with a nationally representative sample of adolescents, young adults, and midlife individuals in Germany. The study started in 2008 and collects data annually. The data include responses from the focal participants (anchors) as well as their partners if the anchor was in a romantic relationship, gave consent to recruit the partner and the partner agreed. At wave 1, a sample of 12,402 participants and 3,743 partners participated in the study. At each wave, participants indicated whether they were with the same partner from the previous wave, and if they had started a new relationship, they were asked if they consented to the researchers contacting their new partner. New partners were assigned a different partner number. Further information about the study can be found in ref. 37.

Sample Description. For the purpose of the primary analyses, we used data from 332 participants (159 men, 173 women) who had self-reports of personality available from 2 different partners during the study period. A majority of the participants (n=295) were German natives with no migration background; 15 were half-German, 8 were ethnic German immigrant (Aussiedler), 7 identified as other non-German background, 1 identified as Turkish background, and 7 did not identify as any. At the time of the last report about their relationship with the ex-partner, participants were 25.49 y old on average (SD = 7.61) and had been together with the ex-partner for an average of 3 y and 10 mo (SD = 4 y and 6 mo). Eighty percent of the past relationships (n=267) were nonmarital, and 31% of the unmarried participants (n=82) were cohabitating.

Measures

Self-descriptions. Participants responded to the Big Five Inventory (BFI-K; ref. 38) that included 21 items assessing extraversion, openness to experience, conscientiousness, agreeableness, and neuroticism at wave 2.[‡] All partners also completed the BFI-K when they first participated in the study.

[†]For 29 participants who had more than 2 partner reports available, we used the first 2 partner reports available, but our key results remained the same when we used other possible pairs (e.g., the first and last partner reports).

 $^{^{\}ddagger}$ For 56 participants who did not complete the BFI-K at wave 2, their responses at wave 6 were used. Participants' personalities were assessed only at those 2 waves. We tested whether participants in our sample (i.e., participants who had 2 different partners' reports available) differed from participants (n=1,779) who had more than 2 partners during the study period, but no personality reports were available from them in terms of the Big Five personality traits. The results of the Welch's t test (39) showed that there was no significant difference in the 5 traits between the 2 groups, |t|s < 1.51, ps > 0.13.

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Park and MacDonald PNAS Latest Articles | 5 of 5