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Romantic ideals, romantic obtainment, and relationship experiences: The complementarity of interpersonal traits among romantic partners

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ABSTRACT

This research applied three different models of complementarity to romantic ideals, romantic obtainment, and the quality of romantic relationships: (i) Carson's (1969) model of interpersonal complementarity (i.e., individuals similar to each other on warmth, but opposite on dominance, are most compatible); (ii) Wiggins's (1979) model of complementarity (i.e., individuals whose personalities occur in a manner predicted by social exchange theory are most compatible); and (iii) the model of similarity (i.e., individuals with similar personalities are most compatible). Study 1 examined the personality traits of 169 single male and female participants and the personality traits they found most desirable in romantic partners. Using randomization tests of hypothesized order relations and Pearson correlations, results suggested

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that only the model of similarity accurately described the personalities participants tended to find romantically desirable. Study 2 examined the personality traits of 212 participants (106 couples) who had been romantically involved for at least 1 year. Results suggested that the model of similarity somewhat described the personalities participants tended to actually obtain as romantic partners, but neither Carson's nor Wiggins's models reached significance. However, further analyses found that only Carson's model of complementarity predicted relationship quality; romantic couples who reported the highest levels of relationship quality were more similar in terms of warmth but were more dissimilar in terms of dominance than romantic couples who reported the lowest levels of relationship quality.

KEY WORDS: circumplex • complementarity • interpersonal • relationship • romantic

On a recent sunny afternoon, the authors of this article witnessed an elderly couple walking in a park near our home. This elderly couple held on to one another as they strolled along in unison. When they sat on a park bench together, their heads tilted towards one another in a manner one would only expect of true sweethearts who had been together for decades. Even their slightest behaviors seemed to complement each other: A hand held out by one was quickly grasped by the other, a meaningful glance was exchanged, and a lean forward for a kiss was returned with a kiss. After observing them for a few minutes, we agreed that they seemed like a perfect match. Then we acknowledged that we really didn't know what exactly makes two people perfect complements of each other. Do birds of a feather really flock together, or do opposites attract? From our brief observations, we could not know if this couple was initially attracted to each other because they had similar personalities or because their personalities were somewhat opposite of each other. More importantly, it was unclear if what initially attracted them to each other was the same thing that produced the seemingly harmonious and loving relationship we witnessed. To this end, the current research examines what type of personality one tends to desire and actually obtain in a romantic partner, and which personalities complement each other to produce loving and harmonious romantic relationships.

Both researchers' and laypersons' observations suggest that some individuals seem to complement each other better than do other individuals. Historically, Harry Stack Sullivan's (1953) Interpersonal Theory of Personality noted that during any dyadic interaction, the behaviors of one person tend to elicit or constrain the behaviors of the other, and vice versa. In a romantic dyad, if person A were to lean forward to kiss person B, the complementary behavior would likely be for person B to return the kiss. However, the behavior of person B is not completely determined by person A (i.e., he or she may opt not to kiss person A). In this manner, complementary behaviors occur in a probabilistic rather than a mechanistic manner

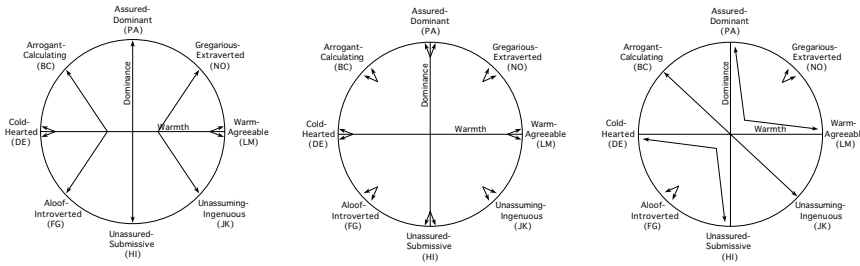
(Horowitz et al., 2006; Pincus, 1994; Tracey, 1994).[1] Interpersonal theorists and researchers (cf. Carson, 1969; Sullivan, 1953) further suggest that when an individual is able to interact with a partner who complements his or her own behavior he or she will likely experience a sense of self-validation and security. This is based on the notion that people feel most comfortable interacting with partners that allow them to maintain their own preferred style of behavior. It is therefore surmised that individuals will enjoy satisfying and lasting relationship when they interact with partners who complement their own interpersonal style (Carson, 1969; Kiesler, 1983; Tracey, 1994).

Complementarity has traditionally been conceptualized at the level of behavioral exchanges. However, because interpersonal theory defines personality as a *pattern* of interpersonal behavior, and because there is an established link between behavior and personality traits (e.g., Funder & Sneed, 1993; Markey, Markey, & Tinsley, 2004), it seems likely that complementarity can also be examined at the level of personality traits. In other words, just as some behaviors are complements of each other (e.g., Person A's kiss might complement Person B's kiss), personalities may also complement each other (e.g., Person A's 'warmth' might complement Person B's 'warmth;' Markey, Funder, & Ozer, 2003). Although research has shown that during limited interactions, specific behaviors tend to be better indicators of complementarity than personality traits (Tracey, 2004), it seems likely that in a long-term romantic relationship (characterized by numerous behavioral interactions) personality will also become an important indicator of complementarity (Tracey, Ryan, & Jaschik-Herman, 2001).

Although the notion of complementarity seems fairly straightforward, there have been various models presented to define which types of personalities 'fit' best together. Fortunately, each of these models can utilize the interpersonal circumplex (IPC; Carson, 1969; Kiesler, 1983; Wiggins, 1979) in order to define complementary personalities. The IPC is a circular ordering of behavioral styles first introduced by researchers at the Kaiser Foundation (Freedman, Leary, Ossorio, & Coffey, 1951; Leary, 1957). The circumplex structure implies that variables measuring interpersonal relationships are arranged on the circumference of a circle using the primary dimensions of dominance (i.e., dominant–submissive) and warmth (i.e., hostile–friendly). Studies have demonstrated that these behavioral styles can also be conceptualized as traits arranged in a circular pattern (Markey & Kurtz, 2006; Markey & Markey, 2006; Wiggins, 1982). While the exact number of interpersonal variables and their ordering has gone through a number of revisions, Figure 1 displays the circular ordering of the eight octant labels presented by Wiggins, Trapnell, and Phillips (1988).

1. Although there are many definitions of complementarity, the current research defines complementarity in a manner consistent with Interpersonal Theory (Carson, 1969; Kiesler, 1983; Leary, 1957). Complementarity specifies the ways in which a person's interpersonal behavior evokes the behavior of an interaction partner. This definition allows complementary behaviors to potentially be opposite (e.g., a dominant behavior might complement a submissive behavior) or similar (e.g., a warm behavior might complement a warm behavior).

FIGURE 1
The interpersonal circumplex and three models of complementarity



Using the two main dimensions of the IPC, Robert Carson (1969) specified the particular manner in which complementarity occurs. In Carson's definition, complementarity occurs when individuals are opposite on the dominance dimension (e.g., dominance complements submission) and similar on warmth (e.g., warmth complements warmth). Figure 1 uses arrows to graphically display each interpersonal trait's complement. For example, if person A is moderately warm and dominant (PA), the complementary personality would be a moderately warm and submissive (HI) person.

Wiggins (1979) presents a definition of complementarity which differs from Carson's definition. Using Foa and Foa's (1974) notion of social exchange, Wiggins's model suggests that every behavior carries with it information which grants or denies status (to the self and to the other) and grants or denies love (to the self and to the other). The complementary behavior is therefore a behavior's logical match (see Figure 1). For example, a person who is assured-dominant (PA) tends to behave in a manner that grants both status and love to the self, but only grants love without status to the other. The complementary personality would therefore be one who is warm-agreeable (LM), who tends to grant love without status to the self and both love and status to the other (Wiggins, 1979).

A final model of complementarity is based on the notion that individuals are attracted to others who exhibit similar characteristics to themselves. It is hypothesized that similarity is sought because each person can enhance or reinforce the self-concept of the (similar) other (Bryne, 1971). For example, the complement of a person who is assured-dominant (PA) would be another person who tends to be assured-dominant. In this manner, the complement of each octant on the IPC is itself (see Figure 1).

Applying complementarity to romantic ideals, romantic obtainment, and relationship quality

Past research examining the topic of assortative mating suggests that people tend to be romantically attracted to others who are similar to themselves

(e.g., Buss, 1985; Vandenberg, 1972). Men and women alike have a propensity to desire romantic partners similar to themselves on traits such as extraversion, agreeableness, emotional stability, conscientiousness, and openness to experience (Botwin, Buss, & Shackelford, 1997). Studies have also found preferences for romantic partners who are similar with respect to certain demographic characteristics such as age, ethnicity, religious background, height, weight, socioeconomic status, values, political orientation, and physical qualities (Buss & Barnes, 1986). As noted by Buss (1985), the notion that people desire homogamy is one of the most replicated findings in human mating research.

Although it appears that individuals seek out romantic partners with personalities similar to their own, this does not necessarily suggest that people are always able to obtain such individuals. A person might believe that an extravert is their romantic ideal, but other criteria might cause him or her to end up in a romantic relationship with an introvert. In fact, studies have found that even though others desire romantic partners whose personalities are very similar to their own, people typically end up in relationships with partners who have only somewhat similar personalities (Botwin et al., 1997) and that over time romantic partners do not necessarily become more like each other (Caspi, Herbener, & Ozer, 1992). It has been suggested that this occurs because desirable mates are likely in short supply and it is simply not possible for everyone to get their ideal romantic partner (Botwin et al., 1997). It is also possible that the lack of congruence between what people want and what people obtain is not due to a weakening of the importance of complementarity, but because the similarity model fails to adequately explain relationship obtainment. In other words, while the model of similarity may explain the characteristics that people desire in a romantic partner, one of the other models of complementarity might better predict with whom an individual will actually form and maintain a relationship.

While examining which model of complementarity best predicts romantic ideals and obtainment is important at the beginning of a relationship, in the study of long-term relationships a more central concern becomes understanding which model of complementarity best predicts love and harmony. Interpersonal theory predicts that relationships that are satisfying will be more complementary than relationships that are unsatisfying (Carson, 1969; Kiesler, 1983; Tracey, 1994). Research examining which model of complementarity best adheres to this prediction has been somewhat mixed. Females tend to describe their close, same-gender friends in a manner similar to Carson's model: Similar to themselves on warmth and different on dominance (Yaughn & Nowicki, 1999). Even after briefly meeting, dyads that are complements as defined by Carson's model report liking each other more and work better together on various tasks than do other dyads (Dryer & Horowitz, 1997; Estroff & Nowicki, 1992; Nowicki & Manheim, 1991). However, in romantic relationships, some research seems to indicate that the similarity model best predicts relationship happiness. Couples with similar personalities and values have been found to experience greater

satisfaction with life, better intimate relationships, and longer lasting relationships (Gaunt, 2006; Luteijn, 1994; Robins, Caspi, & Moffitt, 2000). Support also exists for Wiggins's model as a predictor of relationship longevity (Tracey et al., 2001).

The inconsistencies present in past research examining complementarity may exist because these studies have tended to only examine a single model of complementarity at a time. Research investigating romantic attraction has commonly only examined the notion of similarity, failing to investigate either Carson's or Wiggins's models of complementarity. This omission is likely attributable to the tendency of this research to use measures of the Five-Factor Model of personality instead of the IPC, making it difficult to examine the three models of complementarity. Likewise, research examining relationship quality has tended to use only either Carson's model or the similarity model. The tendency to examine one model at the exclusion of the others is unfortunate because, as seen in Figure 1, all of the models have some overlapping predictions. For example, both Wiggins's model and the similarity model would predict that a person who is a gregarious-extravert (NO; a trait commonly examined by researchers) would be a better complement to someone who is also a gregarious-extravert then he or she would be to a person who is introverted (FG). Due to the overlapping predictions of the models, it would be beneficial to not only examine whether or not a model predicts the personalities of romantic dyads better than chance, but which of the three models predicts these personalities best.

The current article presents two studies that examine the three models of complementarity presented in Figure 1 to determine which model best explains romantic ideals, romantic obtainment, and relationship quality. Study 1 examines which model of complementarity best predicts romantic ideals by relating the personality traits of individuals who are not in romantic relationships to the personality traits they desire in romantic partners. Building upon these findings, Study 2 examines the personalities of romantic partners involved in romantic relationships for at least 1 year in order to investigate which model of complementarity is most applicable to romantic obtainment and relationship quality.

Study 1: Romantic ideals

Method

Participants. To examine which model of complementarity best predicts romantic ideals, data were collected from 169 undergraduate students (M age = 19.01; SD = 1.01), all of whom were seeking romantic partners. This sample was composed of 66 males (39%) and 103 females (61%). Participants were recruited through advertisements placed around campus indicating that researchers were seeking participants who were single and currently interested in finding a romantic partner.

Procedures

All participants completed the following questionnaires in groups of 2 to 6 individuals. The questionnaires were given one at a time to participants in the order presented below.

Self-rated personality. Participants completed the Interpersonal Adjective Scale (IAS-R; Wiggins, 1995) to provide a description of their own personalities. The IAS-R consists of 64 adjective items designed to assess the eight octants of the IPC. For this study, the mean internal consistency estimates (across males and females) were .81 for PA, .86 for BC, .85 for DE, .86 for FG, .86 for HI, .75 for JK, .87 for LM, and .85 for NO. In addition to providing scores for each octant of the IPC, the eight IAS-R octant scales were also used to compute dimensional scores of warmth and dominance.

Filler questionnaires. To help disguise the exact purpose of this study, several questionnaires addressing topics unrelated to this study were completed by participants.

Personality of romantic ideal. In order to describe the personality of one's romantic ideal, participants completed a modified version of the IAS-R. Directions were altered to indicate that participants were to rate each of the 64 items on the degree to which each described their 'romantic ideal.' They were told that this ideal could be a real or a fictional person. The mean internal consistency estimates (across males and females) were .75 for PA, .85 for BC, .89 for DE, .84 for FG, .81 for HI, .70 for JK, .83 for LM, and .87 for NO.

Results and discussion

Before the personality of one's romantic ideal could be examined, it was first important to determine whether or not participants' self-ratings and romantic ideal ratings occurred in a manner predicted by the IPC. According to the IPC, the magnitude of correlations between various octant scales can be predicted based on the distance between the octants. Specifically, correlations of octants closer on the circle are predicted to be greater than those more distal. For example, the correlations for the octants separated by 45° (e.g., PA and BC, BC and DE, etc.) should be greater than the correlations for the octants separated by 90° (e.g., PA and DE, BC and FG, etc.). Taken together, the circular structure presented in Figure 1 generates a total of 288 order predictions.

To evaluate the fit of the circumplex model to the obtained self-ratings correlation matrix, the confirmation or violation of the 288 order predictions was examined with a randomization test of hypothesized order relations (Hubert & Arabie, 1987; Rounds, Tracey, & Hubert, 1992). This test yields an exact probability of obtaining the predicted order among the correlations in the observed data matrix under the null hypothesis that the eight-octant scales are relabeled at random; no assumptions about the independence of the order predictions are made. In a correlation matrix with eight variables, there are a total of 8! (40, 320) possible random matrices that can be used to create a comparison distribution for evaluating the fit of the original matrix. The correspondence index (CI) can serve as an index of fit of the original correlation matrix with the order predictions (Hubert & Arabie, 1987) and is computed by comparing an obtained correlation matrix with the 288 order predictions using the formula:

$$\text{CI} = \frac{\text{number of correct predictions} - \text{number of incorrect predictions}}{\text{total number of predictions}}$$

The CI can be interpreted as a Somers' s statistic (Somers, 1962) and can range from +1 (perfect fit) to –1 (no predictions were met), with a CI of 0.0 indicating the number of predictions met is equal to the number of predictions violated.

Randomization tests and CIs were computed using the statistical package RANDALL (Tracey, 1997) in order to examine the 288 predicted order relations for both male and female self IAS-R ratings and romantic ideal IAS-R ratings. As shown in Table 1, all the randomization tests were significant, and the corresponding CIs indicated that the IAS-R octant scales were adequately fit by a circular structure.

Next, we examined which model of complementarity best predicted the personality of one's romantic ideal. Similar to the earlier analysis, each model presented in Figure 1 predicts different correlations between the self IAS-R octant scales and the romantic ideal IAS-R octant scales. Specifically, correlations of octants closer to complementarity are predicted to be greater than the octants further from complementarity. For example, Carson's model predicts that correlations between complementary octants (e.g., BC and FG, PA and HI, etc.) will be greater than the correlations between scales 45° from complementarity (e.g., BC and HI, PA and FG, etc.). All together Carson's model yields 1,600 separate order predictions. In a similar manner, it is possible to generate slightly different sets of 1,600 order predictions for both the similarity model and Wiggins's model. As with the earlier analysis, a CI and a randomization test of hypothesized order relations can be computed in order to evaluate fit of

TABLE 1
Randomization tests of circular order relations for the IAS-R octant scales

Sample	*N*	Predictions made	Predictions met	Correspondence index	*p*
Romantic ideals					
Self-ratings					
Males	66	288	276	.91	<.001
Females	103	288	277	.93	<.001
Desired partner ratings					
Males	66	288	264	.83	<.001
Females	103	288	246	.72	<.001
Romantic obtainment					
Males	106	288	285	.97	<.001
Females	106	288	273	.90	<.001
Relationship quality					
Low quality					
Males	35	288	280	.94	<.001
Females	35	288	264	.84	<.001
Moderate quality					
Males	36	288	276	.91	<.001
Females	36	288	277	.92	<.001
High quality					
Males	35	288	281	.95	<.001
Females	35	288	272	.89	<.001

the obtained 8 (self IAS-R) × 8 (romantic ideal IAS-R) correlation matrix with the order predictions of each model.

The results of the randomization tests of hypothesized order relations and the corresponding CI for each of the models were computed using the statistical package RANDALL (Tracey, 1997) and are presented in Table 2. As shown in this table, for both females and males the similarity model fit the data better (CI = .80, CI = .84, respectively) than either Carson's model (CI = .28, CI = .29, respectively) or Wiggins's model (CI = .06, CI = .12, respectively). Although the

TABLE 2
Randomization tests of complementary order relations for the fit of the three models of complementarity to romantic ideals, romantic obtainment, and relationship quality

Sample	Predictions made	Predictions met	Correspondence index	*p*
Romantic ideals				
Males				
Carson's model	1600	1028	.29	.025
Similarity model	1600	1470	.84	< .001
Wiggins' model	1600	850	.06	.272
Females				
Carson's model	1600	1016	.28	.028
Similarity model	1600	1437	.80	< .001
Wiggins' model	1600	885	.12	.167
Romantic obtainment				
Carson's model	1600	678	–.12	.092
Similarity model	1600	1091	.39	.008
Wiggins' model	1600	917	.18	.027
Relationship quality				
Carson's model				
Low quality	1600	391	–.50	< .001
Moderate quality	1600	754	–.04	.735
High quality	1600	1011	.32	.006
Low vs. high quality[a]			.39	< .001
Similarity model				
Low quality	1600	872	.10	.225
Moderate quality	1600	901	.14	.092
High quality	1600	938	.16	.138
Low vs. high quality[a]			.04	.375
Wiggins' model				
Low quality	1600	826	.04	.292
Moderate quality	1600	971	.23	.002
High quality	1600	721	–.07	.288
Low vs. high quality[a]			–.06	.712

[a] To examine the difference in complementarity between low relationship quality and high relationship quality couples CI difference statistics were computed. These statistics represent the proportion of predictions met by the high relationship quality couples minus the proportion of predictions met by the low relationship quality couples.

obtained CIs suggest that, overall, the similarity model predicted participants' romantic ideals, as an omnibus test it does not indicate if participants' desired similarity on both the warmth and dominance dimensions. In order to examine this issue, Pearson correlations were computed between participants' own dimensional warmth score and their romantic ideals' warmth score and between participants' own dimensional dominance score and their romantic ideals' dominance score. Results suggested that both males and females desired to have romantic partners who were very similar to themselves in terms of warmth ($r(64) = .75, p < .05$; $r(101) = .78, p < .05$, respectively) and dominance ($r(64) = .52, p < .05$; $r(101) = .56, p < .05$, respectively).

Study 2: Romantic obtainment and relationship quality

Method

Participants. To examine which model of complementarity best predicts romantic obtainment and relationship quality, data were collected from a sample of 212 participants (106 heterosexual romantic couples; M age = 24.86; SD = 7.54). Participants were recruited through advertisements placed in the local newspaper and around the university campus where this research took place. All participants were required to have been in a monogamous romantic relationship with their partner for at least 1 year (M = 3.83 years; SD = 4.61). In the current sample, 30 couples were married (28%), 34 were cohabitating but not married (32%), and 42 were exclusively dating but not living together (40%).

Procedure

Each member of a romantic couple was assessed during the same session. In order to encourage honest and independent answers, participants were seated in different rooms in the laboratory where the study took place. Participants were then given a questionnaire packet that contained the following measures.

Self-rated personality. As in Study 1, participants completed the IAS-R to provide a description of their own personalities. For this study, the mean internal consistency estimates (across males and females) were .81 for PA, .87 for BC, .89 for DE, .90 for FG, .82 for HI, .75 for JK, .90 for LM, and .89 for NO.

Relationship quality. In order to assess the quality of each dyad's romantic relationship, participants separately completed the 15 items of the Marital Interaction Scale (MIS; Braiker & Kelley, 1979) that were designed to assess love (e.g., 'How committed do you feel towards your partner?') and conflict (e.g., 'How often do you and your partner argue with one another?'). A high score on the MIS indicates a participant reported that their romantic relationship is full of love and harmony (i.e., low conflict) whereas a low score indicates a participant reported that their relationship does not have much love and is conflict-ridden. Since the MIS was originally designed to assess married couples, the measure was revised to read 'significant other' instead of 'spouse.' The mean reliability of the MIS (across males and females) was .84, and there was a moderate level of agreement between romantic partners as to the quality of their relationship ($r = .56, p < .05$).

Results and discussion

The models of complementarity were examined to determine which best predicted the personalities of actual romantic couples. As in the earlier study, female and male self IAS-R ratings were examined to determine if they occurred in a manner predicted by the IPC. As shown in Table 1, all the randomization tests were significant, and the corresponding CIs indicated that the IAS-R octant scales were adequately fit by a circular structure.

To determine which model of complementarity best fit the data, the correlations between female IAS-R octant scales and male IAS-R octant scales were examined using randomization tests of hypothesized order relations and CIs. As shown in Table 2, the similarity model fit the data slightly better (CI = .39) than either Carson's model (CI = –.12) or Wiggins's model (CI = .18). In order to separately examine the IPC dimensions of warmth and dominance Pearson correlations were computed between male and female warmth and dominance scores. Results suggested that participants' warmth ($r(104) = .14$, $p = .15$) and dominance ($r(104) = .13$, $p = .18$) were only weakly (and nonsignificantly) related to their actual romantic partners' warmth and dominance.

The relations between relationship quality and the three models of complementarity were next examined. In order to create a measure of relationship quality at the level of romantic dyads, romantic partner scores on the MIS were aggregated.[2] Couples were then split into three different groups: 'Low relationship quality,' those couples who scored in the bottom 33% on the aggregated MIS; 'moderate relationship quality,' those couples who scored in the middle 33 to 66%; and 'high relationship quality,' those couples who scored in the top 33% on the aggregated MIS. Although these couples are the same participants used in the previous analysis, it was important to confirm that splitting the groups did not alter the circular nature of their IAS-R responses. As shown in Table 1, all the randomization tests for females and males in the high, moderate, and low relationship quality groups were significant, and the corresponding CIs indicated that the IAS-R octant scales were adequately fit by a circular structure.

Interpersonal theory predicts that relationships that are satisfying will be more complementary than relationships that are unsatisfactory (Carson, 1969; Kiesler, 1983; Tracey, 1994). It was therefore expected that couples who experienced higher levels of relationship quality would be more complementary than couples who experienced lower levels of relationship quality. In order to examine which model of complementarity best matched this prediction, the correlations between female IAS-R octant scales and male IAS-R octant scales in the high, moderate, and low relationship quality groups were examined using randomization tests of hypothesized order relations and CIs. As shown in Table 2, Carson's model occurred in the predicted manner. Using Carson's model, couples who experienced high levels of love and harmony tended to have high levels of complementarity (CI = .30), romantic dyads who had moderate levels of love and harmony tended to have modest levels of complementarity (CI = –.04) and couples who experienced low levels of love and harmony tended to have low levels of complementarity (CI = –.50).

To test whether or not couples with high relationship quality displayed significantly higher amounts of complementarity than couples with low relationship

2. In the following analyses results were similar for male MIS scores, female MIS scores, and the aggregate MIS scores; therefore only the results dealing with the aggregate MIS scores are reported.

quality, CI differences were computed for each model. The CI difference is defined as the proportion of predictions met by the first correlation matrix (i.e., high relationship quality) minus the proportion of predictions met by the second correlation matrix (i.e., low relationship quality). In a manner similar to the CI, the CI difference can range from +1.0 (all predictions were confirmed by the first matrix and none were confirmed by the second matrix) to –1.0 (none of the predictions were confirmed by the first matrix and all were confirmed by the second matrix), with a CI difference 0.0 indicating that the model of complementarity fit both correlation matrices equally well. The CI difference can be tested for significance by using a randomization test comparing the obtained CI difference against the permutations of the row and columns of the correlation matrices (Tracey, 1994; Tracey et al., 2001). As shown in Table 2, only Carson's model found that couples with high relationship quality were significantly more (CI difference = .39, $p < .05$) complementary than couples with low relationship quality.

Next, in order to better understand the separate importance of the IPC dimensions of warmth and dominance, Pearson correlations were computed for low, moderate, and high relationship quality groups. Specifically, for each group, correlations were computed between male and female warmth and dominance scores. Results indicated that couples with high relationship quality tended to be more similar in terms of warmth ($r(33) = .35$, $p < .05$) than couples with moderate relationship quality ($r(34) = .09$, $p = .60$), who were more similar in terms of warmth than low relationship quality couples ($r(33) = –.16$, $p = .35$). Conversely, couples with high relationship quality tended to be more dissimilar in terms of dominance ($r(33) = –.19$, $p = .13$) than moderate relationship quality couples ($r(34) = .02$, $p = .91$), who were more dissimilar in terms of dominance than low relationship quality couples ($r(33) = .37$, $p < .05$). The above correlations were next examined to determine if high relationship quality couples were significantly more complementary than low relationship couples in terms of warmth (high quality $r = .35$ versus low quality $r = –.16$) and dominance (high quality $r = –.19$ versus low quality $r = .37$). Consistent with Carson's model, results indicated that couples in high quality relationships tended to be significantly more similar to each other in terms of warmth ($z = 2.11$, $p < .05$) and significantly more dissimilar in terms of dominance ($z = 2.32$, $p < .05$) than couples in low quality relationships.

General discussion

Complementarity is generally conceptualized as occurring at the behavioral level. Specifically, when dyads perform behaviors that complement each other, interpersonal theory predicts that their interaction will be satisfying (Carson, 1969; Kiesler, 1983; Tracey, 1994). Because personality is linked to consistent patterns of behavior across interactions (Funder & Sneed, 1993), it was postulated that in long-term romantic relationships (where many interactions would occur) complementarity could also be examined at the level of personality traits. In other words, the personalities of individuals in a romantic relationship may complement each other. To examine this notion, the current study applied three different models of complementarity (Carson's model, Wiggins's model, and the similarity model) to

three different contexts central to romantic relationships: Romantic ideals, romantic obtainment, and relationship quality.

In support of the similarity model, results from Study 1 indicated that single males and females thought their romantic ideal was someone with a personality very similar to their own. Warm individuals desired others who were warm, while people who were dominant were attracted to others who were dominant. Such findings are similar to those of previous research employing the FFM, which suggested that individuals tend to be attracted to others who are similar to themselves (Botwin et al., 1997). It should also be noted that, in this study, Carson's model also significantly predicted romantic attraction. In fact, if a researcher were to only examine this model of complementarity without considering a model of similarity, he or she may conclude that romantic attraction occurs in a manner consistent with Carson's predictions. However, by comparing the effect sizes found for the model of similarity (Mean CI = .82) and Carson's model (Mean CI = .29) it is evident that the model of similarity fits the data much better than does Carson's model. Such findings illustrate the importance of simultaneously examining the three models of complementarity.

In Study 2, personality data from romantic couples were used to examine which model of complementarity best predicted romantic obtainment. Results suggested that the model of similarity best described the personalities of actual romantic couples. In other words, people tended to end up in romantic relationships with others who had personalities somewhat similar to their own. What is perhaps most interesting regarding the results of romantic obtainment, is not that the similarity model was superior to the other models, but that the effect size estimates for this model (CI = .39; *r* warmth = .14; *r* dominance = .13) were lower than the effect sizes found for the romantic ideals provided by single participants in Study 1 (CI = .82; mean *r* warmth = .76; mean *r* dominance = .54). These findings suggest that, while people do tend to obtain romantic partners somewhat like themselves, they are not as similar to themselves as they desire. Such findings may have occurred because other criteria might be relevant to romantic obtainment (e.g., geographic location, demographic variables, etc.) that are not related to the IPC. It is also possible that people tend to form relationships with individuals other than their ideals because desirable mates are a rare commodity and it is simply not possible for everyone to obtain their ideal romantic partner (Botwin et al., 1997).

Building upon these findings, Study 2 examined which model of complementarity was associated with harmonious and loving relationships. To investigate this issue, each model of complementarity was applied to couples who had high relationship quality, couples who had moderate relationship quality and couples who had low relationship quality. Because interpersonal theory predicts that complementarity is related to relationship quality, it was expected that those romantic dyads that experienced high levels of relationship quality would be more complementary than couples who experienced low levels of relationship quality. Of the three models of complementarity examined, only Carson's model supported this prediction.

These results suggest that although single individuals tend to desire a romantic partner who has a personality similar to their own on all the characteristics of the IPC, those people who actually experience the most loving and harmonious relationships have romantic partners who are similar to themselves on some characteristics, but not on others. Specifically, couples who reported the highest levels of relationship quality were more dissimilar in terms of dominance than couples who reported the lowest levels of relationship quality. In other words, those romantic dyads that experienced high levels of love and harmony were more likely to contain one individual who was dominant and one individual who was submissive than romantic dyads that experienced low levels of love and harmony. Although the current studies cannot directly demonstrate the reason why Carson's model best fit these data, interpersonal theory suggests that this type of pairing is ideal because it provides each romantic partner with a sense of self-validation by allowing them to behave in a manner consistent with their personality (Carson, 1969; Sullivan, 1953). For example, a person who is somewhat dominant might enjoy continuously interacting with a submissive romantic partner because he or she allows this person the ability to maintain his or her preferred style of behavior. Furthermore, it is possible that dissimilarity on dominance is ideal in a romantic dyad because a couple composed of two dominant individuals may experience high levels of conflict as both members attempt to exhibit control over the other. A romantic couple composed of two submissive individuals may experience high levels of frustration because neither member of the dyad would tend to take the initiative. Hopefully, future research will utilize the methodology presented in this article to further elucidate these results.

Strengths and limitations of the present studies

Although the findings presented in this research provide important information about complementarity in the context of romantic ideals, romantic obtainment, and relationship quality, these findings must be tempered with an understanding of their limitations. The cross-sectional nature of Study 1 and Study 2 make it difficult to conclude the cause of the discrepancy found between romantic ideals and romantic obtainment. As noted previously, such a difference might have occurred because one's actual romantic partner is frequently not identical to one's romantic ideal. However, these results might also have occurred because the desire of single participants in Study 1 to find a romantic partner who is extremely similar to themselves might have made it difficult for them to actually find a romantic partner, thereby prolonging their single status.

Study 1 is also limited because it relied on relating self-reports of participants' personalities to self-reports of participants' romantic ideals. Self-report measures are often undesirable because they are susceptible to biases including self-enhancement and self-deception. For example, it is possible that the differences found between Study 1 (romantic ideal) and Study 2 (romantic obtainment) might have occurred due to a response bias; Study 1 examined correlations within people (i.e., self-rating of personality were

correlated to self-rating of romantic ideal) whereas Study 2 examined correlations across romantic partners. Finally, the modest sample size employed in Study 2 did not permit comparative analyses of couples in different kinds of relationships (e.g., dating couples, cohabitating couples, and married couples).

The current studies have several important strengths that distinguish them from previous research examining complementarity. First, the current studies examined complementarity in three important relationship contexts: Romantic ideals, romantic obtainment, and relationship quality. The examination of these three contexts allows for a clearer understanding of how complementarity may become more or less important during different stages of a relationship. Second, the current studies simultaneously examined three models of complementarity: Carson's model, the similarity model, and Wiggins's model. By using this methodology, results from the current studies indicated that, although romantic ideals and romantic obtainment are best predicted by the model of similarity, relationship quality is best predicted by Carson's model. Finally, Study 2 collected personality and relationship quality data from both members of a romantic dyad. The ability to examine complementarity and relationship quality using data provided by both members of a dyad makes it extremely unlikely that any type of biases (e.g., self-enhancement and self-deception) could account for the findings regarding romantic obtainment or relationship quality.

Directions for future research and conclusions

The findings and limitations of the current research suggest some possible directions for future research. It is hoped that future longitudinal research will directly address the discrepancy found between romantic ideals (Study 1) and romantic obtainment (Study 2). By examining the same set of individuals from singlehood, to the selection of romantic partners, and through their romantic relationships, potential changes in the importance of the different models of complementary can be better understood. In addition to longitudinal research, it would be interesting to examine the importance of complementarity in romantic couples using behavioral observations. For example, using behavioral methods (c.f., Markey et al., 2003) it could be examined whether or not the behavioral exchanges of romantic couples tend to be more complementary than the behavioral exchanges of other types of dyads (e.g., friends, strangers, coworkers, etc.).

Furthermore, although relationship quality is an extremely broad construct, the current studies operationalized it using measures of love and conflict. Future examination of romantic complementarity in relation to more diverse relationship measures (e.g., satisfaction, comfort, length of relationship, etc.) will further help to demonstrate the importance of complementarity in romantic relationships. Finally, it would be interesting to examine a range of variables that might alter the importance of complementarity in a romantic relationship. For example, various relationship variables such as length of relationship, same-sex vs. opposite-sex relationships, and cohabitation could be examined as potential moderators of complementarity.

Laypersons and (as noted previously) even researchers watching people in a park seem to automatically assume that some individuals are perfect fits (i.e., complements) for other individuals. When people think of finding a serious romantic partner (i.e., their 'soul mate,' 'the one,' etc.) they often think to look for someone who they feel they can grow old with. They imagine someone who will love them unconditionally because they seem to 'fit together' perfectly. Although relationships are complex and endure or fail due to myriad factors, the findings of the current research corroborate the notion that personality and complementarity play a role in the initiation and success of relationships. What may be most interesting is that these findings suggest somewhat of a discrepancy between what single individuals desire in a romantic partner and which personality combinations are related to the experience of a loving and harmonious romantic relationship. Although we will never be able to completely explain the love we witnessed between that elderly couple walking in the park, the current research can provide some guidelines to explain why some couples may experience both an initial attraction and a happy love affair. The present studies indicate that while we desire romantic partners that are very similar to us, we may be happier years later with a partner that is somewhat different than us (at least, in terms of dominance).

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