Emotional intelligence and relationship quality among couples

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Abstract

To assess whether emotional intelligence (EI) is related to self-assessed relationship quality, an ability test of EI and measures of relationship quality were administered to 86 heterosexual couples in a university setting. Results indicated that female partners were significantly higher in EI than male partners and that EI scores were uncorrelated within couples. Two 2 × 2 multiple analyses of variance (performed separately for positive and negative outcomes) assessed how relationship quality measures differed across four different types of couples (high-EI female/high-EI male, low-EI female/low-EI male, etc.). As predicted, couples with both partners low on EI tended to have the lowest scores on depth, support, and positive relationship quality and the highest scores on conflict and negative relationship quality. Counter to our hypotheses, couples with both partners high on EI did not consistently have higher scores on positive outcomes and lower scores on negative outcomes than couples with one high-EI partner.

What emotional abilities predict quality relationships among dating or married couples? Researchers have shown that positive emotions (Gottman, 1982; Gottman & Levenson, 1992), emotional stability (Kelly & Conley, 1987; Russell & Wells, 1994), self-esteem (Arrindell & Luteijn, 2000; Luteijn, 1994), and secure attachment style (Feeney, 1999) all correlate with partners' reports of happiness. Several negative emotional traits such as impulsivity, fearfulness, and depression also reliably predict partner reports of maladjustment (O'leary & Smith, 1991).

The purpose of this study is to assess whether emotional intelligence (EI)—as defined by Mayer and Salovey (1997)—is related to perceived positive and negative relationship qualities among couples. Although no study as yet has directly assessed

whether EI abilities (i.e., the ability to perceive, use, understand, and regulate emotions) are related to these outcomes, recent research indicates that EI, measured with new ability tests, predicts both self- and informant reports of emotional support, conflict, and positive social relations (Brackett, Mayer, & Warner, 2004; Lopes et al., 2004; Lopes, Salovey, & Straus, 2003; Mayer, Caruso, & Salovey, 1999).

Researchers also have speculated about potential links between EI and relationship quality among couples (Fitness, 2001; Mayer, Caruso, & Salovey, 1999). Noller, Beach, and Osgarby (1997), for example, reviewed research showing that accuracy in expressing and recognizing emotions correlates with couples' reports of marital happiness. Carton, Kessler, and Pape (1999) also found that sensitivity and accuracy in nonverbal communication predicts happiness. One skill that is assessed by EI is the perception of emotion; thus, it is reasonable to predict that higher EI might predict greater relationship satisfaction in couples, whereas lower EI might result in relationship dissatisfaction and higher

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conflict. Fitness (2001) offered another hypothesis: "... higher EI might enable people to more effectively manage the delicate emotional negotiations involved in seeking and granting forgiveness" (p. 106); thus, by implication, higher EI may lead to better management of disagreements, which in turn might predict less conflict and higher relationship satisfaction. Rusbult, Bissonnette, and Arriaga (1998) also noted the importance of emotion regulation in marital satisfaction. Their work showed that in comparison with unhappy spouses, happy spouses are more likely to accommodate than to retaliate during conflict.

Salovey, Mayer, Goldman, Turvey, and Palfai (1995) in an initial study and Fitness (2000) in a follow-up study found a positive association between emotion clarity, measured by the Trait-Meta Mood Scale (TMMS), and relationship satisfaction in couples. Partners with high emotion clarity (i.e., a clear understanding of their feelings when they are experienced) reported less difficulty in forgiving a partner-initiated conflict than those with low emotion clarity. Using their own selfreport measure of EI with a small sample (N =36), Schutte, Malouff, Bobik, Coston, and Greeson (2001) found that EI correlated with reports of marital satisfaction (r = .51). They also showed that individuals who perceived their partners to have higher EI reported significantly greater marital satisfaction (r = .72).

The EI measures used in the above studies, however, do not directly tap people's emotional abilities but rather people's selfreported beliefs about their emotional abilities. Recent research however, indicates that self-report EI measures are highly correlated with established measures of psychological well-being and personality (rs > .70; Brackett & Mayer, 2003). Another concern is that self-reported abilities (e.g., verbal intelligence) do not correlate highly (rs < .36) with ability measures (Paulhus, Lysy, & Yik, 1998). Although the individual would seem to be in the best position to make such an assessment, self-reports of abilities may contain a great deal of unwanted variance, mostly in the form of social desirability (DeNisi & Shaw, 1977; Paulhus et al., 1998). Therefore, it would be useful to assess the relationship between EI and relationship quality among couples with a performance-based test such as the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer et al., 2002), which is less susceptible to social desirability response bias (Lopes et al., 2003).

Emotional Intelligence

How is EI defined?

The term *Emotional Intelligence* was formally introduced to psychology in 1990 through two articles; the first provided an initial definition and theory of EI (Salovey & Mayer, 1990), and the second presented a demonstration of how EI could be tested as a mental ability (Mayer, DiPaolo, & Salovey, 1990). Today, the field has broadened, and there are two general approaches to EI in the literature; these are characterized as ability models and mixed models (Mayer, Salovey, & Caruso, 2000). Ability models (Mayer & Salovey, 1997; Mayer et al., 2002) view EI as a standard intelligence. Mixed models (e.g., Bar-On, 1997; Goleman, 1995, 1998; Schutte et al., 1998) are so called because they mix in traits such as optimism, self-esteem, and motivation with aspects of ability EI (Brackett & Mayer, 2003; Mayer et al., 2000). Research on tests that stem from mixed conceptions of EI (as opposed to measures of EI ability) shows that they lack discriminant validity from existing measures of positive and negative affect, correlate highly with measures of personality (e.g., Big Five), and are mostly uncorrelated with ability EI (Bar-On, 1997, 2000; Brackett & Mayer). The MSCEIT is mostly independent of potentially confounding personality variables such as neuroticism and well-being (rs < .30), which makes it possible to analyze the degree to which EI, defined and measured as a distinct mental ability, specifically contributes to relationship quality.

In this study, we focus on EI ability, which pertains to an individual's capacity to reason with and about emotions to enhance cognitive processes and social functioning. In this tradition, EI involves four abilities, including (a) perception of emotion, (b) use of emotion to facilitate thought, (c) understanding

of emotion, and (d) management of emotion in both self and others. According to EI theory (Mayer & Salovey, 1997; Mayer et al., 1999), these four abilities form a hierarchy, increasing in complexity from emotion perception to emotion management. A person's overall EI is the combination of the four abilities.

Measuring EI as a mental ability with the MSCEIT

The four-branch model of EI was first measured with a test called the Multifactor Emotional Intelligence Test (Mayer et al., 1999). This instrument was replaced by a shorter and more reliable test, the MSCEIT (Mayer et al., 2002a). The MSCEIT assesses a person's ability to perceive, use, understand, and regulate emotions with 141 items that are divided among eight tasks (two for each branch). The test yields scores for each branch and a total score.

On the MSCEIT, perception of emotion is measured by two tasks assessing people's ability to identify emotions in pictures of faces (Faces) and emotions suggested by artistic designs and landscapes (Designs). For example, in the Faces task, participants are presented with a picture of a person expressing a basic emotion. Below the picture is a list of emotions. Participants are asked to rate on a 5-point scale how much of a particular emotion is expressed in the picture.

The use of emotion to facilitate thought is measured with two tasks that assess people's ability to describe emotional sensations and their parallels to other sensory modalities (Sensations) and to assimilate predetermined mood into thought processes (Facilitations). For example, the Sensations task presents participants with a sentence asking them to imagine feeling an emotion such as guilt. Participants are then given a list of adjectives pertaining to other sensory modalities (e.g., cold and blue) and then rate how much the feeling of guilt is similar to the adjectives on a 5-point scale from not alike to very much alike.

Understanding emotions is measured with two tasks that assess people's knowledge of how emotions combine to form other emotions (Blends), and how emotional reactions change over time (Progressions). For example, a question on the Blends task presents a statement such as "Acceptance, joy, and warmth often combine to form ...". Participants are then presented with a list of alternatives and asked to choose the most appropriate response.

Finally, emotion management is measured with two tasks that assess people's ability to choose among more or less effective means of managing emotion in private situations (Emotion Management) and interpersonal emotional situations (Social Management) to promote personal understanding and growth. For example, the Social Management task asks participants to read a short story about another person and then determine how effective several different strategies would be in coping with emotions in the story. Participants rate several possible actions ranging from very ineffective to very effective.

Psychometric properties of the MSCEIT

The MSCEIT meets several standard criteria for an intelligence test: it is operationalized as a set of four abilities, it has a factor structure congruent with the theoretical model, scores are determined by consensus or expert scoring, test scores correlate with existing intelligences while also showing unique variance, and scores increase with age (Mayer et al., 1999; Mayer, Salovey, Caruso, & Sitarenios, 2003). The MSCEIT is also highly reliable; it has a full test split-half reliability of .93 (consensus scoring), and reliabilities of the four-branch scores range from .76 to .91 (see Mayer et al., 2003). The test-retest reliability of the total MSCEIT is r = .86 over a 3-week period (Brackett & Mayer, 2003). The properties of the MSCEIT allay concerns about the reliability of earlier EI ability tests (Davies, Stankov, & Roberts, 1998; Roberts, Zeidner, & Matthews, 2001).

Validity of the MSCEIT in the prediction of the quality of social relationships

To date, no studies have investigated the link between the MSCEIT and relationship

quality among couples. There is, however, accumulating evidence that EI is associated with a number of related outcomes, including quality social relationships better social competence. In addition, studies have shown that EI is related to mental health outcomes such as depression (David, 2002) and involvement in potentially harmful behaviors such as excessive alcohol consumption and social deviance (Brackett & Mayer, 2003; Brackett et al., 2004). In this section, however, we focus on findings related to the quality of social relationships, which helped us to develop hypotheses for the present study.

In several studies, EI, measured with the MSCEIT, was associated with different indicators of both positive and negative social relations (all rs in the range of .30 to .40). In two studies at separate institutions, EI branch and total scores were significantly correlated with Ryff's (1989) scale of Positive Relations with Others (Brackett & Mayer, 2003; Lopes et al., 2003). Lopes et al. also found associations between EI scores and reports of more supportive relationships with parents and less antagonistic and conflicted relationships with close friends. Similarly, Brackett et al. (2004) reported a negative association between EI and male college students' behavioral reports of conflict with close friends. A separate study examined college students' interpersonal interactions on a 10-week group project. Students with high EI scores reported more satisfaction with other group members, with the quality of the communication within the group, and with the social support they received from their peers (Côté, Lopes, & Salovey, 2003).

In several studies that focused on the managing emotions subtest of the MSCEIT, EI was associated with the quality of social interactions (rs = .20 to .40). In one study, higher managing emotions scores were related to more positive interactions and emotional support and less negative interactions and conflict with friends, evaluated separately by participants and two friends (Lopes et al., 2004). In a diary study of social interaction, managing emotions scores were also positively related to the perceived quality of interactions with opposite-sex individuals (Lopes

et al.). Parallel findings were obtained in two studies of college students at different universities (Lopes, 2003). Study 1 involved students at the University of Toronto who were divided into groups and studied over a semester. Study 2 involved members of a Yale University residential college who were well known to each other, and for whom sociometric data were collected. In both studies, the managing emotions subtest predicted key aspects of rated social sensitivity and quality of interactions. In all four of the above studies, the main findings remained statistically significant after controlling for Big Five personality traits.

Study Overview

Emotional abilities are thought to be important for social interaction because emotions serve communicative and social functions, conveying information about people's thoughts and intentions, and social encounters (e.g., Ekman, 1973; Keltner & Haidt, 2001; Plutchik, 1984). Romantic relationships represent a crucial domain of social adaptation where emotional abilities are likely to play an important role because they involve intimacy and emotional involvement. In the present research, we investigate relations between EI ability and relationship quality outcomes among couples in a university setting. Our predictions are based on past research on EI components such as the ability to decode nonverbal and emotional signals and emotion management as predictors of relationship satisfaction. We also base our hypotheses on recent research with the MSCEIT, which shows that ability EI predicts relationship quality with friends, specifically higher support and less conflict.

The following hypotheses guide the present research, which examines whether individual scores on EI and dyadic composition on EI predict relationship quality among couples.

1. Each partner's own level of EI will be associated with (a) his or her own relationship quality and (b) his or her partner's relationship quality

- (i.e., reports of higher depth, support, and satisfaction and less conflict).
- 2. Dyadic composition will predict relationship quality in the following ways: (a) couples with both partners low in EI will report lower quality relationships (i.e., higher conflict and less depth, support, and satisfaction) and (b) couples in which at least one partner is high in EI will report higher quality relationships (i.e., more depth, support, and satisfaction and less conflict).

Method

Participants

Participants were recruited from psychology classes; they qualified for the study if they had been involved in an intimate relationship for a minimum of 3 months. The incentive for participation was 2 credit hours toward a general course requirement of participation in 4 hours of research. For couples with both partners enrolled in a psychology class, each partner received 2 credits for participating in the study. For couples that consisted of one psychology student and a partner who was not enrolled in a psychology course, the psychology student received 4 credits (2 credits for own participation and 2 credits for recruiting their partner into the study). The original sample consisted of 98 predominantly White undergraduate college students and their significant others (N = 196 individuals) at the University of New Hampshire. Twelve couples were eliminated due to incomplete data or extreme outliers on one or more variables, leaving 86 couples (N =172) for the analyses reported here. All the couples were involved in heterosexual relationships. The mean age of the female participants was 19.7 years (SD = 3.0); for male participants the mean age was 20.9 years (SD = 4.3). Forty couples had been together between 3 and 12 months, 30 couples between 1 and 2 years, and 16 couples had been romantically involved for more than 2 years. Eight of these couples had been married between 2 and 10 years.

Measures

Emotional intelligence. Emotional intelligence was measured with the MSCEIT (Mayer et al., 2002a). The MSCEIT contains 141 items and consists of eight tasks, which are divided into four classes or branches of abilities including (a) perceiving, (b) using, (c) understanding, and (d) managing emotions. Correct answers on the test are evaluated in terms of agreement with a general or expert consensus, which closely converge (Mayer et al., 2002). Analysis of the MSCEIT provides scores for each branch and a total score. Here, we report analyses using the total EI score, which was highly reliable (split-half reliability was .93). Further details on the scoring, reliability, and validity of the MSCEIT were reviewed in the introduction: details can be found in the technical manual (Mayer et al., 2002b).

Relationship quality. Relationship quality was assessed with the Quality of Relationship Inventory (ORI; Pierce, Sarason, & Sarason, 1991). This inventory contains 29 items that are divided into three scales: Support, Depth, and Conflict. The Support scale assesses perceived availability of social support from the partner; a typical question was "To what extent can you turn to this person for advice about problems?" The Depth scale assesses how important, positive, and secure the relationship is perceived to be, with items such as "How significant is this relationship in your life?" The Conflict scale assesses the degree to which the relationship is perceived as conflicted or ambivalent, with items such as "How often does this person make you feel very angry?" Participants' responses were recorded with a 5-point Likert-type scale. The internal consistency reliabilities of the three scales in the present study were high (α s = .79, .79, and .83, respectively); these Cronbach alphas are consistent with reliabilities reported by others (e.g., Sarason, Pierce, Bannerman, & Sarason, 1993). Pierce, Sarason, Sarason, and Solky-Butzel (1997) reported evidence in support of the validity of the QRI: friendship dyads, and mothers and their adult children, had moderately high

levels of agreement in their QRI assessments of their relationships with each other; QRI Scale scores are also predictive of depression (i.e., low levels of support and depth, and high levels of conflict, are associated with higher depression scores). In addition, the QRI Support scale was negatively correlated with scores on the University of California, Los Angeles Loneliness Scale (Pierce et al., 1991).

Relationship satisfaction. A five-item Relationship Satisfaction Scale (RS) was developed for this study. The scale was modeled after Diener's (1984) Satisfaction with Life Scale. The scale was reworded so participants could report their general satisfaction with their current partner instead of their own general life satisfaction. For example, the original question, "The conditions of my life are excellent," was reworded as "The conditions of my relationship are excellent." The internal consistency reliability of the scale was very high ($\alpha = .93$). Because this scale was new, extensive validity data were not available. To assess validity, we ran correlations of scores on the RS for participants in this study with their scores on the Sternberg (1987) Triangular Love Scale and with scores on the Collins and Read (1990) Anxious Avoidance Scale. For both males and females, scores on RS were significantly positively correlated with scores on all three of the Triangular Love Scales (with rs ranging from .56 to .70); scores on RS also were significantly negatively correlated with anxious attachment (r = -.41).

Behavioral relationship quality. Life Space Scales (Brackett & Mayer, 2003; Brackett et al., 2004; Mayer, Carlsmith, & Chabot, 1998) that were developed in previous studies to assess individuals' (rather than couples') relationship satisfaction were modified for the present research. The Life Space Scales differ from the other self-report scales because they measure discrete, observable, and potentially verifiable behaviors in relationships (e.g., "How many times did you make love in the last month?") instead of each couple's subjective feelings or beliefs (e.g., "How much do you enjoy making love to your partner?").

Preliminary factor analyses of 50 original life space/relationship behavior items (separately for males and females) suggested that a two-factor solution was optimal. However, in these initial factor analyses, 20 items did not have loadings greater than .30 in absolute value on either of these two factors (one factor for positive and one factor for negative relationship quality). These items were dropped, and the remaining 30 items were factor analyzed again. Based upon the subset of items that had the highest loadings on these two factors in the Varimax-rotated solution, two scales were created. The Positive Relationship Life Space Scale (PRLS) consisted of 11 items (e.g., laughed with, said "I love you," sought advice, made love, public displays of affection, discussed feelings, caressed partner, massage, and slept in same bed); this had reasonably high internal consistency ($\alpha =$.82 and .76 for female and male participants, respectively). The Negative Relationship Life Space Scale (NRLS) consisted of 13 items (e.g., verbal argument, criticized partner, screamed at partner, was screamed at by partner, argued and ended up not speaking to each other, hit or threw something at partner, had been hit by partner, had fight and cried, had fight in which partner cried, told lies, insisted on own way, and invaded partner's privacy); this scale also had reasonably high internal consistency reliability ($\alpha = .79$ and .88 for female and male participants, respectively).

Procedure

Groups of 10 to 15 couples were tested in classroom settings. Upon arrival, each participant was asked to read and sign an informed consent form. Questionnaire booklets containing all measures were distributed; most responses were recorded on computer-scorable answer sheets. The MSCEIT was administered first, followed by demographic questions, the QRI, the new RS measure, and the Life Space Behavior items. To ensure the independence of responses, partners were separated into different rooms to complete the surveys. Response sheets for the MSCEIT and the other questions were coded with identification numbers so the data could be

matched after the study session was over. Participants were provided with debriefing information at the end of the session.

Results

Results are divided into three parts. First, basic descriptive statistics are presented for all measures. In addition to means and standard deviations for all the measures, correlations and t tests were performed to assess whether scores were correlated between partners (i.e., did high-EI male partners tend to be with females with high EI?) and to assess possible gender differences (e.g., did males have lower EI than females?) Second, we examined correlations between individuallevel EI scores and self-reports of relationship satisfaction and perceived relationship quality; each person's EI score was correlated with that individual's self-reports on relationship quality and also with his or her partner's self-reports of relationship quality. Third, we assessed whether dyad composition (whether each partner scored high or low on EI) was related to assessments of relationship quality. To see how relationship outcomes differed across dyads, 2 × 2 multiple analyses of variance (MANOVAs) were performed using male and female EI (coded 1 = below median, 2 = above median) as factors. Prior research with EI suggests that EI may predict negative outcomes better than positive ones; for that reason, negative and positive relationship outcomes were assessed in separate MANOVAs. Thus, the dependent variables for the first MANOVA were the eight positive relationship quality outcomes (four each for males and females): Depth, Support, RS, and PRLS. The dependent variables for the second MANOVA were the four negative relationship outcome variables (two each for males and females): Conflict and NRLS.

Descriptive statistics

Descriptive statistics in Table 1 indicate that females scored significantly higher on EI than males (as in prior research with the MSCEIT; Brackett et al., 2004). EI scores were not significantly correlated within couples; that is, there was no tendency for high-

EI females to be with male partners with high EI, r(84) = .06, p = .57. The means and standard deviations on all variables were similar to values reported in past research. All variables had adequate ranges of scores, and none of the means suggested that this sample was unusual (i.e., mean EI for the sample was close to the mean for the normative samples used in development of the MSCEIT; see Mayer et al., 2002b).

Between-partner consistency in reports of relationship quality

Each partner had scores on six outcome measures of self-perceived relationship quality: Depth, Support, and Conflict; RS; and scores on the PRLS and NRLS. Table 1 reports the mean values on these six scales, with separate means reported for male and female participants. The two columns on the right side of Table 1 report the Pearson correlations between these measures for partners and *t* tests of male versus female means.

For five of the six relationship quality assessments, the correlations between partners were statistically significant (ranging from r = .26 for Support to r = .60 for PRLS). The only outcome measure for which there was no significant correlation between partners was NRLS; apart from this outcome, the agreement between partner perceptions of relationship quality appeared to be reasonably high.

Gender differences on EI and relationship quality measures

The last column in Table 1 presents paired sample t tests to assess gender differences in the means on EI and the relationship quality measures. As predicted, there was a statistically significant gender difference in mean EI (t (85) = 4.09, p < .001) such that females scored significantly higher on EI than males; this was a fairly strong effect $(\eta^2 = .16)$.

Females rated the quality of the relationships significantly higher than their male partners on Depth and Support. Males rated Conflict significantly higher than their female partners did ($\eta^2 = .05$ to .12). There was no significant gender difference in RS, PRLS, or NRLS scores.

	Fema	ıles	Ma	ıles			
	M	SD	\overline{M}	SD	r	t	η^2
EI	105.2	9.89	98.7	11.7	.06	4.09***	.16
RS	4.13	.82	3.98	.86	.41***	1.52	
Depth	4.41	.46	4.25	.59	.40***	2.58*	.07
Support	4.57	.43	4.45	.51	.26*	2.00*	.05
PRLS	3.63	.63	3.63	.60	.60***	.05	
Conflict	2.24	.55	2.50	.74	.43***	-3.42***	.12
NRLS	1.40	.33	1.51	.52	.17	-1.82	

Table 1. Descriptive statistics for EI and self-reported relationship quality measures for female and male dating partners, N = 86 couples

Note. RS = Relationship Satisfaction; PRLS = Positive Relationship Life Space; NRLS = Negative Relationship Life Space; EI = emotional intelligence. The t tests are paired samples comparisons of female versus male means, df = 85. *p < .05. ***p < .001.

Correlations between individual EI and individual's own reports of relationship quality

The next question to be considered was whether each individual person's total EI was correlated with that person's own self-reported relationship quality. For example, did women who scored higher on EI tend to have higher scores on RS, Support, Depth, and PRLS and lower scores on Conflict and NRLS? Correlations between EI scores and relationship quality assessments are reported in Table 2. For females, all six of the outcome measures had nonsignificant correlations with female total EI. For males, only two of the six correlations were significant; male EI was significantly correlated with male self-reported Support (r = \pm .22) and NRLS (r = -.28). When Bonferroni corrections were applied (i.e., if the per comparison alpha is set to .05/12 = .004), none of these correlations were judged significant. Overall, there was not much evidence that high EI (for just one individual) is associated with a tendency to form positive evaluations of dating relationships.

Correlations between individual EI and partner's reports of relationship quality

We also examined whether there were significant correlations between an individual's

total EI and that individual's partner's selfreported relationship quality. For example, did women who scored higher on EI tend to have male partners with higher scores on RS, Support, Depth, and PRLS and lower scores on Conflict and NRLS? The correlations in Table 2 provide the answer to this question. Female EI scores were not significantly correlated with any of the relationship quality assessments by male partners, and male EI scores were significantly correlated with only one of the six relationship quality assessments by female partners (the correlation between male EI and female RS was r =.21). Using Bonferroni-corrected alpha levels for each significance test, none of these correlations would be significant. Overall, there was little evidence that high EI (for just one individual) is associated with a tendency to elicit positive evaluations of dating relationships from a dating partner.

Dyad composition and relationship outcomes: MANOVA results

The main question of interest was how dyad composition on EI might be related to relationship quality measures. Women and men were each divided into high versus low groups based on EI scores; a median split on total EI was done separately for males and females. This yielded four types of couples: high EI

Table 2. Correlations between male and female partners' EI scores and relationship quality outcomes, N = 86 couples

	Male EI	Female EI
Support (M)	.22*	02
Conflict (M)	06	.08
Depth (M)	.21	.14
RS (M)	04	06
PRLS (M)	09	07
NRLS (M)	28*	.10
Support (F)	04	.02
Conflict (F)	16	02
Depth (F)	.06	.08
RS (F)	.21*	.01
PRLS (F)	01	16
NRLS (F)	17	13

Note. M = male; F = female; RS = Relationship Satisfaction; PRLS = Positive Life Space; NRLS = Negative Life Space; EI = emotional intelligence.

female/high EI male (N=20), low EI female/low EI male (N=20), high EI female/low EI male (N=23), and low EI female/high EI male (N=23). Due to the very low correlation between male and female partner EI scores, the Ns in these four groups were approximately equal. For this reason, the factorial MANOVA is almost perfectly orthogonal.

Two 2 × 2 MANOVAs were performed (with high/low female EI as the first factor and high/low male EI as the second factor). The outcome measures for the MANOVAs were moderately intercorrelated (see Table 3). However, the correlations did not seem to be high enough to justify combining these variables into an overall composite index of relationship quality, and it also seemed useful to keep the measures separate because they assessed different aspects of relationshipsperceived support, depth, conflict, satisfaction, and self-reported behaviors. Thus, for the first set of analyses, all the positive relationship outcome measures were used as dependent variables (i.e., Depth, Support, RS, Positive Life Space, each rated by both the male and the female partner). For the second set of analyses, all the negative relationship outcomes measures were used as dependent variables

(Conflict, NRLS, each rated by both the male and female partner).

Based on prior research, it was expected that couples made up of a low-EI female and a low-EI male would score low on positive relationship outcomes and high on negative relationship outcomes. The multivariate test results were as follows. There were no significant main effects for level of male partner EI or for level of female partner EI. However, there were significant multivariate interactions between male EI and female EI for both positive and negative outcomes. For the multivariate interaction on the positive outcomes, Wilk's $\Lambda = .784$, F(8, 75) = 2.58, p = .015; and for the negative outcomes, Wilk's $\Lambda = .829$, F(4, 79) = 4.07, p < .001.

The means on all outcome variables for the four types of couples (based upon dyad composition: both partners high in EI, both partners low in EI, etc.) are presented in Table 4. In general, couples with both partners low on EI scored lower on positive outcome measures, and higher on negative outcome measures, than other types of couples.

To assess the nature of the differences among group means, three sets of contrasts were set up. The four groups that were compared were Group 1 = low-EI female with low-EI male; Group 2 = high-EI female with low-EI male; Group 3 = low-EI female with high-EI male; and Group 4 = high-EI female with high-EI male.

We did not expect significant differences in relationship outcomes between the two different kinds of couples who were mismatched on EI (Group 2 vs. Group 3). Indeed, relationship quality outcomes were not statistically different when comparing these two groups. Thus, for couples with one partner high in EI, the relationship outcomes were essentially similar whether the partner high in EI was female or male.

We predicted that couples with both partners high in EI would tend to have the best relationship outcomes. However, when comparing couples in which both partners had high EI with the mismatched couples, only variables showed statistically significant differences, and those were in a direction opposite to predictions. The mean on male Conflict was

^{*}p < .05.

Table 3. Correlations among relationship quality outcomes, N = 86 couples

	Male partner					Female partner						
	Support	Conflict	Depth	RS	PRLS	NRLS	Support	Conflict	Depth	RS	PRLS	NRLS
Support (M)	1.00	59***	.52***	.55***	.21*	33**	.26*	38***	.24*	.36**	.16	22*
Conflict (M)		1.00	46***	71***	05	.49***	11	.43***	08	.26**	.08	.32**
Depth (M)			1.00	.62***	.28**	31**	.22*	28**	.40***	.41***	.06	09
RS (M)				1.00	.26**	34**	.21*	43***	.24*	.41***	.16	21
PRLS (M)					1.00	.04	.34**	19	.52***	.41***	.60***	.06
NRLS (M)						1.00	17	.37***	22*	23*	.02	.17
Support (F)							1.00	42***	.58***	.52***	.29**	07
Conflict (F)								1.00	31**	61***	07	.43***
Depth (F)									1.00	.62***	.60***	.01
RS (F)										1.00	.42***	33**
PRLS (F)											1.00	.16
NRLS (F)												1.00

Note. M = male; F = female; RS = Relationship Satisfaction; PRLS = Positive Relationship Life Space; NRLS = Negative Relationship Life Space. *p < .05. **p < .01. ***p < .001.

Table 4.	Results	of 2	\times 2	? factorial	MANOVA:	High/low	EI for	· male	and fe	male	partners,
N = 86 cc	ouples										

		F				
	M (low) F (low)	M (high) F (high)	M (low) F (high)	M (high) F (low)	F test for interaction	η^2
Positive outcomes	S					
Support (M)	4.26	4.36	4.52	4.62	5.47*	.062
Depth (M)	3.94	4.33	4.34	4.35	2.83	
RS (M)	3.68	3.73	4.17	4.27	8.14**	.090
PRLS (M)	3.56	3.38	3.83	3.71	5.63*	.064
Support (F)	4.49	4.51	4.68	4.60	2.27	
Depth (F)	4.25	4.34	4.54	4.47	4.65*	.054
RS (F)	3.63	4.10	4.33	4.39	8.67**	.096
PRLS (F)	3.71	3.48	3.62	3.71	0.25	
Negative outcome	es					
Conflict (M)	2.77	2.77	2.30	2.25	10.69**	.115
NRLS (M)	1.77	1.54	1.50	1.28	6.13*	.070
Conflict (F)	2.59	2.29	2.10	2.04	11.20**	.120
NRLS (F)	1.59	1.35	1.30	1.38	3.74	

Note. RS = Relationship Satisfaction; PRLS = Positive Relationship Life Space; NRLS = Negative Relationship Life Space; M = male; F = female; EI = emotional intelligence.

higher for Group 4 (both partners high in EI) than for Groups 2 and 3 (with only one partner high in EI), t(82) = -2.23, p = .01. The mean on male RS was lower for Group 4 (both partners high in EI) than for Groups 2 and 3 (with only one partner high in EI), t(82) = 2.19, p = .031. The mean on male PRLS was lower for Group 4 (both partners high in EI) than for Groups 2 and 3 (with only one partner high in EI), t(82) = 2.47, p = .015.

Contrary to our general expectation that couples with both partners high in EI would tend to have better quality relationships than couples with both partners low in EI, 10 out of 12 of these comparisons were nonsignificant. However, the two differences that were significant (male Depth, t(82) = -2.18, p = .032, and female Negative Life Space, t(82) = 2.36, p = .021) were in the expected direction; that is, couples with both partners high in EI had slightly more positive outcomes.

Finally, we predicted that couples with both partners low in EI would tend to have the least positive relationship outcomes. Indeed, for 9

out of 12 of the relationship outcome variables, the difference between the mean for Group 1 (both partners low on EI) versus Groups 2 and 3 (one partner high on EI) was statistically significant, $\alpha = .05$. All these significant differences were in the predicted direction. Couples with both partners low on EI scored significantly lower on female ratings of Depth and RS, and on male RS and male perceived support and depth of the relationship. The couples with both partners low in EI scored significantly higher on female Conflict, male Conflict, female NRLS, and male NRLS. Differences were not significant for these three outcome variables: male and female Positive Life Space and female perceptions of Support.

Discussion

Because this was the first study to assess EI ability in couples, the results should be viewed as exploratory. Only one of our two general predictions about EI was supported: Couples in which both partners were low on

p < .05. *p < .01.

EI tended to report significantly poorer relationship outcomes than couples in which one or both partners were high in EI.

Lack of partner similarity on EI

Past research on dating couples has generally found evidence for partner similarity on many characteristics. For example, the Boston Couples Study (Hill, Rubin, & Peplau, 1976) reported significant correlations between partners on a variety of characteristics that included highest degree planned, SAT scores, physical attractiveness, height, sex role traditionalism, romanticism, and religiosity. Other studies have reported partner similarity on verbal and reasoning skills and personality traits such as Openness to Experience (Buss, 1984; McCrae, 1996; Watkins & Meredith, 1981). No evidence of partner similarity on EI was found in the present study. Most partner characteristics for which similarity has been reported in past research are characteristics that can be noticed easily and perceived accurately. Perhaps, couples in relatively short-term relationships do not evaluate their partners in terms of EI, or they may not be able to evaluate partner EI accurately. It is possible that couples involved in longer term relationships may show greater similarities in EI than the couples in this study; this could reflect a difference in initial partner selection, or if EI is modifiable by learning and experience, people involved in long-term relationships might become more similar to each other on EI over time.

Gender differences on EI and relationship outcome measures

As in past research using ability measures of EI, female participants scored significantly higher than male participants on EI (Brackett et al., 2004; Mayer et al., 1999). This finding is consistent with a large body of past research; females score higher than males on most ability-based tests of sensitivity to nonverbal communication of emotion (e.g., Hall, 1978, 1984; Rosenthal, Hall, DiMatteo, Rogers, & Archer, 1979). This gender difference might be due to differences in sex role socialization; for example, women may be

encouraged more than men to pay attention to, express, and respond to emotions (Brody, 1985). We are presently investigating the extent to which gender differences in EI may be related to parenting styles and gender role orientation.

Paired samples *t* tests were also performed to assess possible gender differences in all the relationship quality outcome measures. Female partners reported significantly higher Depth and Support and male partners reported significantly higher Conflict; there were no significant gender differences on the RS measure or the Life Space/relationship behavior measures. The mixed results are not entirely consistent with past findings of Pierce et al. (1991); they found no gender differences in Depth, Support, and Conflict.

Partner agreement on assessment of relationship quality

Past research on relationship satisfaction in couples has sometimes yielded surprisingly low correlations between partners on ratings of relationship satisfaction. The lack of agreement has led some marriage researchers to speak of "his marriage" and "her marriage" as separate experiences (e.g., Bernard, 1972). Thus, we expected only modest levels of agreement between dating couples. In fact, the levels of agreement we found between male and female partners were fairly high, particularly for Depth, Conflict, RS, and Positive Life Space relationship behaviors. The only relationship outcome measure for which there was no significant correlation between partners was the NRLS. This last finding is consistent with other research, which showed that partners did not agree on objective reports of intimate partner violence (Armstrong, Wernke, Medina, & Schafer, 2002).

Correlations between individual EI and relationship quality outcomes

There were few significant correlations between individual male and female EI scores and the various relationship outcome measures. That is, the presence of a female partner high in EI was not systematically associated with higher male scores on positive relationship outcomes (Support, Depth, Satisfaction) or lower scores on negative relationship outcomes (Conflict, NRLS). There were a few significant correlations between male EI and relationship outcomes. Male EI was associated with higher levels of self-perceived Support and lower levels of NRLS and female partner reports of RS. Overall, however, there were no consistent strong relations between the EI scores of individual partners and relationship outcomes.

Based on past research (Brackett et al., 2004; Lopes et al., 2003), we expected that individual EI scores would be positively correlated with favorable relationship outcome measures and negatively correlated with unfavorable relationship outcomes (evaluated both by the self and the partner). In earlier research with individuals rather than couples, Brackett et al. found that negative relationship behaviors were associated with lower EI scores, particularly for males. Although this finding was replicated, there was an overall lack of significant correlations between individual EI scores and relationship outcomes in this study.

The lack of significant individual-level correlations between EI and ratings of satisfaction and relationship quality could be due to validity problems with either the MSCEIT or some of the outcome measures. In the future, a comprehensive assessment of EI and its ability to predict relationship outcome will need to include a broader range of measures, both for EI and for relationship outcomes such as satisfaction. However, it is also conceivable that it is necessary to have information about dyad composition (is there at least one high-EI partner?) and not only individual-level EI scores in order to predict perceptions of relationship quality.

When behaviors are assessed in the context of relationships, it may not be sufficient to look at the characteristics of each individual (such as the EI of male partners) in isolation. It may be necessary to look at the composition of the couple (i.e., Are both partners low in EI? Is one partner high in EI and the other

low?) to predict relationship outcomes from EI. In the context of a relationship, the key issue may be how much combined EI is available to the *couple* as a resource, rather than how much EI is available to each individual.

Couple composition on EI and relationship outcomes

We expected that the more total EI a couple had to draw upon as a resource, the better their relationship outcomes would be. Thus, we expected that couples made up of two high-EI partners would have the most positive relationship outcomes and that couples made up of two low-EI partners would have the least positive relationship outcomes; couples with just one high-EI partner were expected to fall in between. This prediction turned out to be only partly accurate. Couples in which both partners scored low on ability EI were clearly distinguishable from the other three types of couples, with significantly lower relationship quality on most outcome measures (for outcome measures that were not statistically significant, the nonsignificant differences were all in the same direction). However, couples in which both male and female partners scored high on EI did not consistently show more positive relationship outcomes than couples in which just one partner scored high on EI. In fact, on a few outcome measures, the couples who had two high-EI partners actually scored slightly lower than couples who had only partner with high EI.

It may be premature to speculate about the reasons for the differences among the four types of dyads, but this pattern of results might tentatively be interpreted as a threshold effect. Perhaps, it is sufficient for a couple to have at least one partner with high EI; that may be enough EI for the couple to do well in terms of conflict management. Adding a second high-EI partner may not result in any additional improvement in couple functioning. Perhaps, when a couple consists of two high-EI partners, there is "too much" emotional perception and management going on. Murray, Holmes, and Griffin (1996) suggested that high levels of accuracy are not always conducive to relationship satisfaction;

people may be happier when they have some positive illusions about their partners. High EI might reduce some of these positive illusions through more accurate perceptions about negative affect and faults. Finally, it is possible that if both partners view themselves as "emotion experts," they may compete to be in charge of emotion management.

Limitations

There were a number of limitations to this study. First, our participants were mostly first- and second-year college students whose relationships may be quite different from those of committed partners in longer term relationships or people from a community sample. Most of the students in this study did not live with their partners, and most couples were together for less than 1 year; perhaps, the role of EI in couple satisfaction surfaces only after couples have been together for extensive periods of time.

Another concern is whether the group differences in EI and the predictive validity of EI for males and females will replicate in larger and more diverse samples. It is possible that the effects found in this study are unique to college students in the New England area of the United States and will not generalize to individuals in ethnically diverse areas.

It is also possible that this study did not provide accurate information about the high-EI male/high-EI female couples. The Ns for each type of couple were relatively small (ranging from 20 to 23 couples in each cell of the 2×2 factorial). A relatively large number of significance tests were conducted, and some of the significant outcomes might be attributable to Type I error. Different measures of EI, or different measures of relationship quality or relationship satisfaction, might have led to different conclusions. More research is needed to assess whether the lack of a clear difference between the couples with two high-EI partners and the couples with just one high-EI partner can be replicated.

The role of EI in couples' satisfaction will need to be examined over multiple studies with a wide range of participants and a variety of measures (for EI and for relationship satisfaction and relationship quality). If the differences in perceptions of relationship quality that were found in this study for different types of dyads can be replicated in future research, it may be useful to assess the emotion regulation process in various types of dyads (couples with neither, one, or both partners high in EI). That is, what do couples with two low-EI partners do differently than other types of couples when they try to negotiate conflicts? Do couples with two low-EI partners engage in more avoidant behaviors, more partner blaming, or have greater misunderstandings about each other's feelings than couples with at least one high-EI partner?

Summary

The clearest result obtained in this study was that couples with both partners low in EI tended to have less positive relationship outcomes (on most, but not all, of our dependent variables) than couples in which at least one partner had high EI. Fitness (1996, 2000, 2001) raised interesting questions about the role of EI in intimate relationships. For example, Fitness suggested that higher EI might enable people to more effectively manage the delicate emotional negotiations involved in seeking and granting forgiveness and that happiness in relationships might depend upon each partners' ability to cope constructively with conflict and to understand and manage negative emotions like anger and hate. The present results suggest that when at least one partner has high EI, couples tend to have more positive relationships. This finding suggests that it may be useful to examine the processes involved in EI abilities in relationships. These results also suggest that it may not be sufficient to measure EI for just one partner; to understand the role of EI in relationships, researchers may need to obtain information about the EI of both partners.

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