PERSONALITY PROCESSES AND INDIVIDUAL DIFFERENCES

Optimism in Close Relationships: How Seeing Things in a Positive Light Makes Them So

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Does expecting positive outcomes—especially in important life domains such as relationships—make these positive outcomes more likely? In a longitudinal study of dating couples, the authors tested whether optimists (who have a cognitive disposition to expect positive outcomes) and their romantic partners are more satisfied in their relationships, and if so, whether this is due to optimists perceiving greater support from their partners. In cross-sectional analyses, both optimists and their partners indicated greater relationship satisfaction, an effect that was mediated by optimists' greater perceived support. When the couples engaged in a conflict conversation, optimists and their partners saw each other as engaging more constructively during the conflict, which in turn led both partners to feel that the conflict was better resolved 1 week later. In a 1-year follow-up, men's optimism predicted relationship status. Effects of optimism were mediated by the optimists' perceived support, which appears to promote a variety of beneficial processes in romantic relationships.

Keywords: optimism, relationship satisfaction, perceived support, close relationships

I have heard of reasons manifold Why Love needs be blind, But this the best of all I hold— His eyes are in his mind.

—Samuel Taylor Coleridge (1811)

Individuals' perceptions of the social world are more than just objective reports of an external reality. Social perceptions are shaped in the mind of the perceiver, a fact that can have very real consequences for social life. Romantic relationships, in particular, have long been observed by poets and writers to be substantially

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affected by the cognitive dispositions of the individuals involved. As Coleridge might say, lovers' eyes are in their minds.

In this article, we present an investigation of the consequences of one particular cognitive disposition, namely optimism, within romantic relationships. Is optimism associated with happier and longer lasting romantic relationships? To answer this question, our research was designed to test two related hypotheses. First, we tested the hypothesis that optimists and their partners would have relationships that are more satisfying, are characterized by better conflict resolution, and are longer lasting. Second, we tested the hypothesis that the reason why optimists have better relationship outcomes is that they perceive their partners as more supportive. We tested these hypotheses in cross-sectional analyses of couples'

¹ Optimism and pessimism can be conceptualized several different ways: as opposite poles of a single dimension, as two distinct dimensions, or as discrete categories. In this article we treat optimism both conceptually and empirically as a single, bipolar dimension, an approach that was supported by analyses of the data. To avoid cumbersome language, we have used the term *optimists* in this article as a shorthand, meaning in effect, "individuals who score higher in optimism, relative to those who score lower." It is not our intention to suggest that optimists are a discrete category.

reports about their relationships, in analyses of how couples responded to a conflict conversation, and in a 1-year follow-up of relationship dissolution.

Optimism, Perceived Support, and Social Functioning

Optimism is defined as the cognitive disposition to expect favorable outcomes (Scheier & Carver, 1985). A substantial body of research has linked optimism to effective coping and to positive mental and physical health outcomes (e.g., Scheier, Carver, & Bridges, 2001; Taylor, Kemeny, Reed, Bower, & Gruenewald, 2000). A smaller number of studies have also shown that optimism leads to better social functioning. For example, optimism is associated with lower social alienation (Scheier & Carver, 1985) and with longer lasting friendships (Geers, Reilley, & Dember, 1998). In romantic relationships, two prior studies have suggested that optimism about a particular relationship predicts greater satisfaction in that relationship and reduced likelihood of relationship dissolution (Helgeson, 1994; Murray & Holmes, 1997), although the mechanisms explaining such a relation were not directly tested.

Why might optimists have more positive experiences in relationships? As a cognitive disposition, optimism should influence how individuals attend to and interpret others' behaviors and intentions. We propose that within a close relationship, this cognitive disposition may manifest itself as *perceived support*, the belief that one's partner is able and willing to provide support of inturn have a number of benefits: It has been shown to lead individuals to feel that their relationship facilitates their personal and collective goals (Brunstein, Dangelmayer, & Schultheiss, 1996; Kaplan & Maddux, 2002), and it may buffer against stress and negative affect in relationships (Dehle, Larsen, & Landers, 2001). This latter effect may be particularly important in close relationships.

Research on perceived support indicates that, like optimism, it is moderately stable over time (Sarason, Sarason, & Shearin, 1986), and it appears to be something more than simply a direct reflection of others' actual supportive behaviors (Barrera, 1986; Belsher & Costello, 1991; Newcomb, 1990). Yet despite the agreement among many researchers that perceived support is influenced by personality variables, Lakey, McCabe, Fisicaro, and Drew (1996) wrote that "surprisingly, there has been very little research on the personality factors that predict the development of perceived support" (p. 1278).

Among personality factors that might promote perceived support, optimism seems to be a likely candidate. Perceived support is associated with positive biases in evaluating and remembering supportive behaviors in specific interactions and relationships (Lakey et al., 1996; Lakey & Cassady, 1990; Pierce, Sarason, & Sarason, 1992). Furthermore, the proposed mechanisms of perceived support—positive affect, coping self-efficacy, and adaptive coping—are all robustly associated with optimism (Chang, 2001; Cozarelli, 1993; Scheier et al., 2001). Optimists are better liked by others, which may reinforce their expectations about how others will treat them (Carver, Kus, & Scheier, 1994). In relationships, we expect that optimists would be more likely to perceive others' behaviors as supportive and to respond accordingly.

A few studies have offered some evidence directly linking optimism to perceived support. Associations between optimism and perceived support have been found among air crash rescue workers (Dougall, Hyman, Hayward, McFeeley, & Baum, 2001), bereaved men (Park & Folkman, 1997), and college students (Sarason, Levine, Basham, & Sarason, 1983). In a longitudinal investigation, Brissette, Scheier, and Carver (2002) investigated the relationship between optimism and perceived social support. In a sample of incoming college students, optimism was associated with concurrent reports of perceived support and number of close friendships at the beginning of college and with increases in perceived support over the course of the semester. The increases in perceived support mediated the effect of optimism on depression, though not the effect of optimism on stress. Brissette and colleagues' findings are important and suggestive, but they were not able to examine relational outcomes such as relationship satisfaction or conflict resolution; their study also did not examine the effects of an individual's optimism on relationship partners.

The Present Study

The available evidence suggests that optimism is associated with positive outcomes in relationships in general, possibly as a result of processes that promote and maintain perceived support. Our particular interest was in examining these processes in the context of close relationships. Optimism and perceived support are often studied in terms of their consequences for social life in general; an examination of close relationships offers several distinct opportunities to complement this research. For researchers who study close relationships, studying optimism and perceived support can potentially provide insights into the cognitive processes that maintain security and closeness between partners. For researchers who study optimism, close relationships are an important life domain for which optimism may have meaningful consequences.

Studies of perceived support also suggest that there may be important processes taking place in the context of dyadic relationships that could be missed in broad-bandwidth studies of social life. Although individuals do differ in their general tendency to perceive all others as supportive, perceived support also draws substantially on relationship-specific perceptions (Lakey et al., 1996). That is, individuals form distinct judgments about the supportiveness of other individuals, above and beyond their broad judgments about others in general. Although much research on social support has focused broadly on social networks, this finding suggests that it is also important to examine the consequences of perceived support in the context of specific relationships.

In developing our questions and hypotheses, we organized our investigation around two guiding questions. First, what consequences, if any, does optimism have for satisfaction in close relationships, both for the optimist and for the optimist's partner? Second, does perceived support explain the relation between optimism and relationship satisfaction?

Because of the complexity of the research design, we present the findings in three parts (see Table 1). Part 1 examines the cross-sectional relations among both partners' optimism, perceived support, and relationship satisfaction at Time 1. Part 2 reports a closer examination of how the couples reacted to conflict (Time 2) and how well they felt the conflict was resolved 1 week later (Time 3). Part 3 examines an objective outcome, relationship maintenance versus dissolution, 1 year later (Time 4).

imepoint (time since Time 1)	Procedure	Major measure		
	Part 1			
Time 1	Questionnaire packet	Optimism, perceived support, relationship satisfaction		
	Part 2			
Time 2 (1 week)	Laboratory-based conflict conversation	Positive conflict engagement		
Time 3 (2 weeks)	Post-conflict follow-up	Conflict resolution		
	Part 3			
Time 4 (1 year)	One-year follow-up	Relationship status		

Table 1
Overview of Design, Procedures, and Measures

Part 1: Optimism and Perceived Support in a Dating Relationship

In Part 1, we examined partners' reports regarding their dating relationship in general. We hypothesized that optimism would be associated with greater relationship satisfaction. Furthermore, we expected not only that optimists themselves would report greater relationship satisfaction than would pessimists but also that the partners of optimists would report greater relationship satisfaction than the partners of pessimists. Such an effect would indicate that the positive relational consequences of optimism are not just "in the head" of the optimists. We further hypothesized that the effects of optimism would be mediated by optimists' tendency to perceive their partners as supportive in the relationship.

To rule out possible confounds, we conducted several additional analyses. One possible confounding variable was partner investment: Perhaps optimists attract more supportive partners, in which case an effect of optimism on perceived support could simply reflect an accurate appraisal rather than a perceptual disposition. Thus, we also obtained reports from each partner of offered support in the relationship to use as control variables. If optimists have a global tendency to see their partners as supportive, that relation should be independent of the actual amount of support offered by their partners.

Finally, some studies have suggested that optimism may be correlated with the personality traits of Neuroticism, Extraversion, or self-esteem (see Scheier et al., 2001). Thus, we conducted additional control analyses to ensure that the effects of optimism were independent of these other dimensions of individual differences, as well as the individuals' ages, the length of the relationship, and whether the partners were living together.

Method

Procedure and Participants

We examined data from a study of dating couples assessed at multiple time points over a 1-year period (see Table 1). For the analyses presented in this article as Parts 1 and 2, we included couples from the original sample who completed all measures at Times 1, 2, and 3 (but not necessarily Time 4); this left us with 108 couples (N = 216) for the present report. In Part 1 we analyze data from Time 1, when participants completed measures of personality, social support, and the dating relationship.

At least one member of each couple was an undergraduate recruited from one of three northern California universities. Couples were exclusive and had been dating for at least 6 months at the start of the study, with a median relationship length of 16 months; 12% of couples were cohabiting. Participant ages ranged from 18 to 25 years, with a mean age of 20.4 years. The ethnic and racial composition of this sample was 2.1% African American, 23.8% Asian, 56.3% Caucasian, 14.6% Latino/Hispanic, 0.8% Native American, and 2.5% other. Participants were paid \$15/hr for their participation.

Measures

Optimism. The Life Orientation Test (LOT; Scheier & Carver, 1985) is an eight-item self-report measure of general outcome expectancies. Sample items include "In uncertain times, I usually expect the best" and the reverse-coded item "If something can go wrong for me, it will." Responses range from 1 (strongly disagree) to 5 (strongly agree). We rescaled scores of all individual difference measures to percent of maximum possible (POMP) metric, which sets the theoretical range of a scale from 0 to 100. POMP scoring is a linear transformation of raw scores and thus does not affect standardized analyses, but it can aid in interpretation of raw scores by putting them on an intuitive metric (Cohen, Cohen, Aiken, & West, 1999). Actual scores on the LOT, in POMP metric, ranged from 22 to 100; means and standard deviations for the LOT and other major variables are reported in Table 2. Alpha reliability coefficients were .80 for men and .86 for women, and factor analysis indicated a unidimensional structure. All of our data analyses controlled for possible confounding due to partner similarity on optimism. However, it is worth noting that the correlation between partners' optimism was r = .12, p = .22. In other words, there was not a strong or reliable tendency for optimists to be partnered with other optimists.

Perceived support. To assess perceived support in the dating relationship, we used the Maintenance Questionnaire (MQ; Stafford & Canary, 1991). Participants rated 24 statements concerning their partner's behaviors on a scale from 1 (strongly disagree) to 7 (strongly agree). The MQ has five subscales that cover a broad range of supportive behaviors: (a) positivity (e.g., "Does not criticize me"), (b) openness (e.g., "Encourages me to

 $^{^2}$ We compared the 108 couples included in this report with the 12 couples who did not return at Times 2 or 3. Analyses indicated no differences on optimism for the men or women of these couples (rs < .07, ps > .52); however, the men in the 108 included couples were somewhat higher in perceived support (r = .26, p = .004) and higher in relationship satisfaction (r = .19, p = .04). The women in these couples did not differ significantly on those dimensions (rs < .13, ps > .16).

SD

15.9

Variable	1. MLOT	2. MMQ	3. MCSS	4. MCONV	5. MRES	6. FLOT	7. FMQ	8. FCSS	9. FCONV	10. FRES
1. MLOT	_									
2. MMQ	.36	_								
3. MCSS	.32	.68	_							
4. MCONV	.19	.44	.49	_						
5. MRES	.21	.42	.40	.46	_					
6. FLOT	.12	.21	.26	.23	.26	_				
7. FMQ	.09	.41	.50	.51	.33	.26	_			
8. FCSS	.15	.29	.36	.30	.29	.27	.62	_		
FCONV	.16	.46	.41	.71	.49	.30	.49	.31	_	
10. FRES	.23	.25	.26	.40	.48	.32	.23	.32	.43	_
M	66.2	81.4	80.4	0.0	5.0	66.8	79.1	82.1	0.0	5.5

Table 2
Correlations, Means, and Standard Deviations for Main Measures from Parts 1 and 2

16.11

Note. N = 108 couples. Effect sizes greater than .20 are significant at p < .05. The first letter in the variable name indicates gender (M = male, F = female). LOT = Life Orientation Test; MQ = Maintenance Questionnaire; CSS = Couple Satisfaction Survey; CONV = positive engagement in conflict conversation (average of z-scored self-reports and partner-reports); RES = resolution of conflict.

2.5

17.8

12.8

0.7

disclose my thoughts and feelings to him/her"), (c) assurances (e.g., "Stresses his or her commitment to me"), (d) social network (e.g., "Focuses on common friends and affiliations"), and (e) sharing tasks (e.g., "Helps equally with tasks that need to be done"). The five subscales were all positively correlated (mean r=.38, ranging from .20 to .58), so we averaged the five scales and converted to POMP metric to create a global measure of perceived support from the dating partner. Scores ranged from 35 to 100. Alphas (computed at the item level) were .91 for men and .92 for women

12.1

Relationship satisfaction. To measure relationship satisfaction, we used the Couple Satisfaction Scale (CSS; Cowan & Cowan, 1990). The CSS includes eight items that are rated on scale from 1 (very dissatisfied) to 5 (very satisfied). A sample item is, "In general, how do you feel about the closeness and distance in your relationship with your partner now?" Whereas the MQ, our measure of perceived support, asks members of couples to report what their partners do, the CSS asks individuals how they feel about the relationship. CSS scores, computed in POMP metric, ranged from 9 to 100. Alphas for the CSS were .89 for men and .89 for women.

Control measure: Offered support. We used a subset of 10 items from the Investment Scale (IS; Lund, 1985), which asks the participant to rate "how much you feel you have invested in your relationship in each of the following ways" on a scale from 1 (not invested) to 7 (very invested). Items were selected to match the subscales of the MQ, for example, "Trying to encourage and support your partner" (positivity), "Telling your partner your true feelings about the relationship" (openness), "Integrating your partner into your family" (social network), "Making formal agreements about your relationship, such as deciding to go steady, get engaged, or get married" (assurances), and "Doing favors for or helping your partner, such as lending money or doing errands" (tasks). The items were summed and converted to POMP metric to create a global self-report measure of offered support. Scores ranged from 39 to 100; means were 76.8 (SD = 13.2) for men and 76.7 (SD = 11.1) for women. Alphas were .80 for men and .72 for women.

Control measures: Extraversion, Neuroticism, self-esteem, and demographics. Extraversion and Neuroticism were measured with eight-item scales from the Big Five Inventory (John & Srivastava, 1999). Alphas for Extraversion were .89 for men and .88 for women; alphas for Neuroticism were .77 for men and .82 for women. Self-esteem was measured with the 10-item Rosenberg Self-Esteem Scale (Rosenberg, 1965); alphas were .88 for men and .90 for women. We also measured each partner's age, how long the couple had been together, and whether they were cohabiting.

Discriminant validity among optimism and relational measures. Conceptually, the measures of optimism, perceived support, offered support, and relationship satisfaction are all supposed to measure different things.

However, it was important to establish discriminant validity; a possible counterhypothesis was that the measures simply reflected a general relational positivity factor. To test this counterhypothesis, we ran a confirmatory factor analysis in which all four of the men's measures loaded on a latent "men's positivity" factor, all of the women's measures loaded on a latent "women's positivity" factor, and the men's and women's factors were allowed to correlate. The analysis showed that the counterhypothesis did not fit the data, $\chi^2(19, N = 108) = 52.9, p < .001$; normed fit index (NFI) = .80; root-mean-square error of approximation (RMSEA) = .13. Analyses of reduced sets of variables, created by eliminating optimism or offered support, did not show substantially better fit.

16.4

0.7

2.5

Results and Discussion

For our analyses we were interested in estimating both withinperson and between-persons effects—for example, how an individual's optimism relates to his or her own relationship satisfaction (a within-person effect) and to his or her partner's relationship satisfaction (a between-persons effect). Both of these kinds of questions are addressed by the actor—partner interdependence model (APIM; Kashy & Kenny, 1997), a data analysis procedure for dyads. The APIM was also designed to deal with the violations of statistical independence associated with dyadic data. Thus, we adopted the APIM as our basic data-analytic strategy.

The APIM estimates two kinds of effects: actor effects and partner effects. Actor effects are within-person effects: They represent the influence of an individual's level of a predictor variable on that individual's level of an outcome variable. Partner effects are between-person effects: They represent the influence of an individual's level of a predictor on that individual's partner's level of the outcome variable. APIM estimates also control for confounding due to partner similarity.

The APIM is rooted in regression (Kashy & Kenny, 1997). As with regression, it is possible to extend the APIM to include moderators, control variables, and mediators. We had a substantive interest in taking advantage of all of these possibilities. One important question was whether gender moderated the actor and partner effects. In the APIM, actor and partner effects are aggre-

³ We thank an anonymous reviewer for suggesting this analysis.

gated across both members of the couple. When members of couples are distinguishable on some variable—such as gender, in the case of our heterosexual dating couples—it is possible to ask whether actor and partner effects are moderated by gender. All of the analyses we report were tested for moderator effects of gender. Unless reported otherwise, such effects were not significant, and thus results apply to both men and women.⁴

The basic APIM can also be elaborated to test models with multiple predictors (for control analyses) or with mediated paths. Shrout and Bolger (2003) reported that more sensitive tests of mediation can be conducted by using bootstrap analyses, as compared with other methods. Thus, we ran our analyses in Amos 4.01 (Arbuckle, 1999), which can conduct bootstrap analyses.

Do Optimists and Their Partners Report Greater Relationship Satisfaction?

We expected that optimists and their partners would experience their relationships as more satisfying. To test this hypothesis, we performed an APIM analysis using optimism to predict relationship satisfaction. The results indicated that optimists reported greater relationship satisfaction. The standardized actor effect was .27, p < .001, with a 95% confidence interval (CI) ranging from .15 to .38. (The p values and CIs reported for all APIM analyses are bias-corrected values from bootstrap analyses.) Furthermore, optimists' partners also reported greater relationship satisfaction, indicating that the positive relational consequences of optimism were not just "in the head" of the optimists: standardized partner effect = .18, p = .006, 95% CI = (.06, .30).

Does Perceived Support Mediate Relations Between Optimism and Relationship Satisfaction?

Having established that optimism was related to relationship satisfaction, we then tested whether this relation was mediated by perceived support. Following Shrout and Bolger's (2003) procedure (the logic of which is modeled on Baron & Kenny, 1986), this required four further steps. Each step must produce a significant result to proceed to the next. First, we tested whether optimism predicts perceived support. Second, we tested whether perceived support predicts relationship satisfaction when controlling for optimism. Third, we tested the mediated paths from optimism via perceived support to relationship satisfaction; a significant bootstrap test would support mediation. This bootstrap test is a more powerful replacement for the Sobel test used in conventional mediation analysis. Fourth, we tested the direct paths from optimism to relationship satisfaction when controlling for perceived support; this last step would indicate whether mediation was partial or complete.

Did optimism predict perceived support? The results indicated that optimists perceived greater support from their partners: actor effect = .29, p < .001, 95% CI = (.17, .41). Optimists' partners had marginally higher levels of perceived support: partner effect = .12, p = .07, 95% CI = (-.01, .24).

Did perceived support predict relationship satisfaction? The effect of perceived support on an actor's own relationship satisfaction was substantial: actor effect = .58, p = .001, 95% CI = (.44, .70). Individuals who perceived greater support also had more satisfied partners: partner effect = .16, p = .003, 95% CI = (.07, .27).

Were the mediated paths significant? The bootstrap tests indicated that the actor effect of optimism on relationship satisfaction, reported earlier, was significantly mediated by perceived support: mediated actor effect = .18, p = .001, 95% CI = (.09, .27). Likewise, the effect of optimism on a partner's relationship satisfaction was also significantly mediated by the optimist's perceived support: mediated partner effect = .10, p = .003, 95% CI = (.03, .18).

Did the direct effects indicate full or partial mediation? If the direct effect of optimism on an actor's own relationship satisfaction was still significant, that would indicate partial (rather than full) mediation of the actor effect. This effect was not significant: direct actor effect = .10, p = .15, 95% CI = (-.03, .24). Nor was the direct partner effect significant: direct partner effect = .07, p = .17, 95% CI = (-.03, .18). Thus, the analyses indicated the effects of an individual's optimism on both the individual's own relationship satisfaction and on a partner's satisfaction could be explained by the optimist's perceived support.

Control Analyses

To ensure that the effect of optimism on global perceived support was not a result of optimists attracting more supportive partners, we conducted an APIM analysis testing the effect of optimism on perceived support while controlling for offered support. The effects of optimism were virtually unchanged: actor effect = .28, p = .001, 95% CI = (.16, .40); partner effect = .10, p = .13, 95% CI = (-.02, .22). Thus, optimists' perceptions of their partners' supportiveness could not be explained away by them attracting genuinely more supportive partners.

We also wanted to ensure that the effects of optimism on relationship satisfaction were specific to optimism rather than being attributable to related traits. To test this, we conducted APIM analyses with covariates, controlling for individual differences in Extraversion, Neuroticism, and self-esteem, as well as both partners' ages, the length of the relationship, and whether the couple was living together; covariates were tested one by one because of concerns about multicollinearity. Pitted against each covariate, optimism always was a significant predictor; furthermore, no covariate had a significant effect on relationship satisfaction after controlling for optimism (all absolute effects < .12; all ps > .16). Thus, we felt fairly confident that the effects of optimism on relationship satisfaction were not confounded with broader personality traits, with self-esteem, or with the demographic and background variables we examined.

Part 1 thus shows that the romantic relationships of optimists are characterized by greater relationship satisfaction than the relationships of those who are less optimistic. The mediation analyses suggested that optimists' general tendency to see their partners as supportive mediated these positive relationship outcomes. Not only did optimists report greater relationship satisfaction, but so did their (not necessarily optimistic) partners, suggesting that the

⁴ The APIM can be specified as a path model with equality constraints between members of the dyad; in this study, the APIM was specified by setting men's parameter estimates equal to women's. The unconstrained or "saturated" model produces separate parameter estimates for men and for women. Thus, the chi-square test of model fit (which compares the constrained model to a saturated model) is, in the present context, a test of moderation by gender.

positive relationship outcomes are not merely a Pollyanna-like fantasy of the optimists. Because Part 1 was based on cross-sectional data, however, the ordering of variables in the mediational model was based on conceptual considerations rather than on the design of the study. In Part 2, we adopted a design in which the temporal structure of the design gave us a stronger basis to evaluate whether the relationship benefits of optimism are explained by perceived support.

Part 1 focused on global perceptions and feelings about the relationship. In Part 2, we wanted to move beyond this global level of analyses and take a closer look at the role of optimism in relationship processes. To do this, we brought the same couples from Part 1 into the laboratory and facilitated a conflict conversation. We assessed whether optimists and their partners perceived each other as supportive during the conflict, and whether that perception of support contributed to both partners' reports of how well the conflict was resolved 1 week later.

Part 2: The Conflict Conversation

In dating relationships, a common stressor is disagreement between partners, such as disagreement about finances or time spent together. How members of a couple perceive and react to disagreements can be important for the health of the relationship (Bradbury & Fincham, 1990; Carstensen, Gottman, & Levenson, 1995; Gable, Reis, & Downey, 2003). In Part 2, we examined how the couples in our study responded to conflict by bringing them into the laboratory to have a conversation about the most stressful area of current disagreement in their relationship. Immediately after the interaction, we asked each member of the couple to report how positively and constructively they had engaged in the conflict, and how positively and constructively their partner had engaged. One week later, we asked each member of the couple how well they had resolved the conflict as a couple. In measuring positive conflict engagement, we believed that it was critical to take advantage of the participants' position as informants within their relationships to tell us about how effective they were in addressing the conflict together. In essence, we were interested in the shared reality of the relationship—the couple's joint construal of how effectively they mutually dealt with the conflict.

We hypothesized that optimists and their partners would both see the conflict as better resolved 1 week after their conversation. We also hypothesized that this resolution would be explained, at least in part, by a shared perception that both partners engaged positively and constructively during the conversation. These hypotheses were brought together in a double-mediation model. In Part 1, we found that optimists had a global tendency to perceive their partners as supportive. Now, we anticipated that this global tendency toward perceived support would be manifested in the more specific context of the conversation through positive engagement and that this positive engagement would be recognized by both partners. More positive engagement in the conflict would, in turn, lead to a better resolution to the conflict in the eyes of both partners.

In examining whether optimists and their partners reported better conflict resolution, we considered the alternative explanation that optimists' relationships might be characterized by relatively low-intensity conflicts. That is, optimists might appear to be good at resolving conflict, but only because their conflicts are relatively easy to resolve. To address this possibility, we also examined the participants' ratings of how intensely they disagree about various topics in their relationship, including the one discussed; this measure was taken before the conversation took place.

Method

Procedure

The conflict conversation procedure was modeled after that used by Carstensen et al. (1995).5 On arrival at the laboratory at Time 2, a female experimenter gave participants an overview of the study. Participants were told that the study was about "how couples talk to each other about important conflicts or areas of disagreement in the relationship." Thus, they would need to talk to each other for 10 min and complete questionnaires concerning their reactions to the conversation. Both members of the couple had separately reported on their area of greatest current disagreement in the Time 1 questionnaire set using the Couple Problem Inventory (Gottman, Markman, & Notarius, 1977). In this questionnaire, participants indicated how much they disagree with their partner in a number of preestablished areas (money, jealousy, recreation, etc.) and also had the opportunity to list additional areas of disagreement. After rating disagreement across all areas, participants then filled in a response to the question, "Which is currently the greatest area of disagreement in your relationship?" (additional questions asked for the second and third greatest areas). Prior to the Time 2 session, the experimenter randomly selected either the male's or female's area of greatest disagreement. The experimenter then raised the topic and asked each partner to describe (a) more specifically how the problem area was relevant to their relationship, (b) the last time this problem came up between them, (c) his or her emotions surrounding this specific incident, and (d) why he or she experienced these emotions. If the partners' responses indicated that the topic was not likely to be appropriate for the experiment, the experimenter selected a different area of disagreement. Disagreement in the area chosen for discussion, rated by participants on a scale from 0 (don't disagree at all) to 100 (disagree very much), averaged 60 for men and 65 for women. The couples discussed the topic for 10 min. At the end of the conversation, participants completed questionnaires about positive conflict resolution behaviors.

One week later (at Time 3), participants returned to the laboratory to complete questionnaires about the conflict topic and the conversation they had in the laboratory. Participants rated the degree to which the conflict had been resolved since the conversation.

Measures

Intensity of disagreements. On the Couple Problem Inventory, each partner rated the intensity of their disagreement in each potential area of disagreement, using a scale from 0 (don't disagree at all) to 100 (disagree very much). We computed disagreement scores by averaging ratings across the 13 preestablished areas and, if applicable, the 1 or 2 additional areas identified by the participant (for men, M=23, SD=14; for women, M=23, SD=13). Alpha reliabilities of the disagreement composite, computed across the 13 preselected topics that every participant rated, were .81 for men and .74 for women.

Positive engagement in conflict. After the conversation, participants reported the extent to which they and their partners engaged in positive or

⁵ The data presented in this article were originally collected as part of an experimental study of emotions and physiology. For the purposes of the experimental study, physiological measurements were taken in the Time 2 laboratory session, and couples were randomly assigned to have one member suppress or reappraise his or her emotions or to a control condition (Richards, Butler, & Gross, 2003). Our present focus is on individual differences rather than the effects of the experimental manipulation, and none of the effects reported in this article interacted with experimental condition.

supportive behaviors during the conflict conversation. Sample items include, "During the conversation, to what extent were you [was your partner] a good listener?" "During the conversation, to what extent did you [your partner] try to understand your partner's [your] point of view?" and "During the conversation, to what extent did you [your partner] criticize your partner [you]?" (reverse scored). A total of 17 items were rated on a scale from 0 (none/not at all) to 10 (a great deal/extremely). We averaged the items to create composites. Self-reports ranged from 3.8 to 9.7; partner reports ranged from 3.0 to 9.4. Means (and SDs) were as follows: men's reports of women, 6.8 (1.3); women's reports of men, 6.9 (1.3); men's self-reports, 6.9 (1.2). Alphas were .87 for men's reports of women, .86 for women's reports of men, .83 for men's reports of their own behavior.

To simplify the analyses, we created a positive engagement variable for each individual that aggregated across data sources. That is, the positive engagement variable for men was an average of the men's self-reports with women's reports of their male partners, and vice versa to create an aggregate for women; variables were converted to z scores before averaging. These aggregates were justified by the substantial (though not perfect) agreement between self-reports and partner reports: agreement between men's self-reports and women's partner reports, indexed as an alpha coefficient, was .64; agreement between women's self-reports and men's partner reports was .53. To make sure that we were measuring the shared reality of the relationship and not merely the positive biases of optimists, we also examined the reports that relied on a single data source (either self or partner) and attempted to replicate all of the analyses with the singlereporter variables. In the model run with partner reports, optimists' own positive engagement would be reported by their partners, and thus the actor effects would be immune from any positive perceptual bias "in the heads" of optimists. In the model run with individuals' construals of their own behavior, the optimists' partners' behavior would be reported by the partners rather than the optimists; thus the partner effects would be untainted by optimists' internal biases. If these analyses replicated the findings with the aggregated variables, that would ensure that the effects reflected the shared reality of the relationship rather than the idiosyncratic views of one person.

Conflict resolution. Two items, rated on a scale from 0 (none/not at all) to 10 (a great deal/extremely), were used to assess both partners' feelings about how well the conflict was resolved 1 week after the conversation: "At this point, to what extent is the conflict you talked about in your previous session resolved?" and "At this point, to what extent have you and your partner moved in the right direction to resolve the conflict you talked about in your previous session?" These two items were averaged to create conflict resolution scores. Actual scores covered the full range of the scale. Alphas were .80 for men and .81 for women.

Controls. As in Part 1, we examined Extraversion, Neuroticism, self-esteem, both partners' ages, length of relationship, and cohabitation status as control variables. We also included a measure of relationship satisfaction (the CSS from Part 1) to rule out the possibility that participants were simply saying good things about how they resolved conflict because they were generally satisfied with their relationships.

Results and Discussion

Did Optimists Have Less Intense Disagreements?

We examined the effect of optimism on both individuals' ratings of the intensity of disagreement in their relationships. Optimists and their partners described their disagreements as somewhat less intense: actor effect = -.15, p = .02, 95% CI = (-.29, -.02); partner effect = -.16, p = .01, 95% CI = (-.30, -.03). Thus, we included intensity of disagreement as a control variable when testing the effects of optimism on conflict resolution.

Did Optimists and Their Partners See the Conflict as Better Resolved?

Were optimists' relationships characterized by better positive conflict resolution, as perceived by both partners? In an APIM analysis entering optimism and intensity of disagreement simultaneously to predict conflict resolution, the actor effect of optimism was .17, $p=.018,\,95\%$ CI = (.05, .31), and the partner effect of optimism was .15, $p=.02,\,95\%$ CI = (.02, .28). Individuals who rated their disagreements as relatively intense did report poorer conflict resolution, actor effect = $-.20,\,p=.01,\,95\%$ CI = ($-.35,\,-.04$); the partner effect was not significant (p=.13). From this analysis it can be concluded that both optimists and their partners agreed that their conflicts had reached a more satisfactory resolution 1 week later and that this effect could not be explained away by baseline differences in the intensity of their disagreements.

Do Perceived Support and Positive Engagement Mediate the Benefits of Optimism?

We hypothesized that optimists' global perceived support would promote positive engagement in the conflict conversation, as recognized by both partners, and that this would explain the effects of optimism on achieving a more satisfactory conflict resolution. Part 1 already demonstrated the effect of optimism on global perceived support; here we present evidence testing the remaining elements of the double-mediation hypothesis.

Did perceived support promote positive engagement? We ran APIMs testing the effects of global perceived support on the aggregated positive engagement measure. The analyses showed that individuals with greater perceived support were seen as engaging more positively in the conflict: actor effect = .32, p = .004, 95% CI = (.22, .42). In follow-up analyses in which we analyzed the self-reports and partner reports separately, this effect was significant regardless of whose reports of positive engagement we analyzed: Individuals with higher global perceived support saw themselves as engaging more positively in the conflict, and their partners saw them that way as well.

The analyses also showed that an individual's perceived support predicted the partner's positive engagement: partner effect = .35, p = .001, 95% CI = (.26, .45). Again, the follow-up analyses indicated that this effect was significant with both data sources: Individuals who were high in global perceived support saw their partners as engaging more positively in the conflict, and their partners shared that perception.

In an additional follow-up analysis that included intensity of disagreement as a control variable, perceived support still had significant actor and partner effects on positive engagement. Intensity of disagreement did not have significant actor or partner effects in this analysis (ps > .25).

Did positive engagement predict better resolution 1 week later? Individuals who engaged more positively in the conflict conversation reported better conflict resolution 1 week later: actor effect = .27, p = .002, 95% CI = (.13, .41). Their partners also saw the conflict as better resolved: partner effect = .26, p = .002, 95% CI = (.11, .40). These analyses held up regardless of the data source for the positive engagement variable.

Was the effect of optimism on conflict resolution mediated by perceived support and positive conflict resolution? We tested for mediation by evaluating whether the mediated paths from opti-

mism, through perceived support, through positive engagement, to conflict resolution were significant. The compound mediated path from optimism to the optimist's own report of conflict resolution was significant: mediated actor effect = .07, p = .001, 95% CI = (.03, .12). The compound mediated path from optimism to the partner's conflict resolution was also significant: mediated partner effect = .07, p = .001, 95% CI = (.04, .12). This analysis supported the mediation hypothesis.

Was the mediation full or partial? In the double-mediation model, there are six ways that direct effects could have "bypassed" the mediated pathways. Optimism could have had a direct effect on an actor's own conflict resolution or on a partner's conflict resolution that was not mediated by perceived support or positive engagement. Optimism could have had direct actor or partner effects on positive engagement that were not mediated by perceived support. Additionally, perceived support could have had direct actor or partner effects on conflict resolution that were not mediated by positive engagement.

To test these various possibilities together, we took advantage of Amos's model-comparison capabilities to test models with full and partial mediation. In the full-mediation model, depicted in Figure 1, we allowed only effects from optimism to perceived support, perceived support to positive engagement, and positive engagement to conflict resolution. (As noted earlier, we tested for moderating effects of gender by constraining men's and women's paths to be equal; thus a = a', b = b', and so on. No gender moderation was found, so we report the results of the analysis with equality constraints.) The second model, called the partial-mediation model, was a less-restricted model that added all of the previously described indirect paths to the model depicted in Figure 1.

On its own, the full-mediation model was a good fit to the data: $\chi^2(22, N=108)=25.1, p=.29$, NFI = .90, RMSEA = .036. However, compared with the partial-mediation model, the full-mediation model's fit was slightly worse: $\Delta\chi^2(6, N=108)=12.7, p=.05$. When we examined the individual paths in the partial-mediation model, we found that all of the effects specified in the full-mediation model were still significant. In addition, however, optimism had a direct effect on a partner's conflict resolution (i.e., its effect was partially but not wholly explained by the mediating variables): direct partner effect = .12, p=.04, 95% CI = (.01, .26).

Control Analyses

We separately analyzed each link in the double-mediation model controlling for Extraversion, Neuroticism, self-esteem, partners' ages, length of relationship, cohabitation status, relationship satisfaction, intensity of disagreement, and which partner's topic was (randomly) selected by the experimenter. All of the links in the double-mediation model remained significant when each of these control variables was included.

Part 2 showed that optimism was associated not just with global relationship satisfaction but also with how well both partners perceived their engagement and resolution of a significant area of conflict in a relationship. This effect seemed to be partially driven by optimists' tendency to perceive their partners as supportive, which not only led optimists to engage more positively in discussing the conflict (according to both optimists and their partners) but also elicited more positive engagement from their partners as well.

Our emphasis on the participants' reports of engagement in the conflict discussion and resolution of the conflict allowed us to gain valuable insights into their relationships. By asking both partners for their assessments of their own engagement, their partners' engagement, and the conflict resolution, we were able to assess the shared social reality of these intimate relationships. Nevertheless, if optimism affects the shared reality of a relationship, then at some point that shared reality might affect outcomes that are objectively verifiable. For Part 3, we examined what is literally the ultimate relationship outcome: relationship dissolution.

Part 3: The 1-Year Follow-Up

Parts 1 and 2 demonstrated that optimism was associated with relationship satisfaction and subjective conflict resolution, largely owing to the association between optimism and the perception of greater social support. These findings suggest that optimism influences relationship processes relevant to relationship maintenance and survival. In Part 3, we examined whether the dating couples were still together 1 year after the initial phases of the study. Because dating relationships are not as enduring as marriages, it was reasonable to expect that enough relationships would have ended that we could test for effects of optimism on relationship longevity. We hypothesized that optimism would be associated with relationship status at the 1-year follow-up and that this effect would be mediated by perceived support.

Method

We attempted to contact all original participants via e-mail 1 year after their participation in Part 2. Because data collection for Part 2 spanned several months, we contacted couples within 1 week of the 1-year anniversary of their participation in Part 2. If neither member of a couple

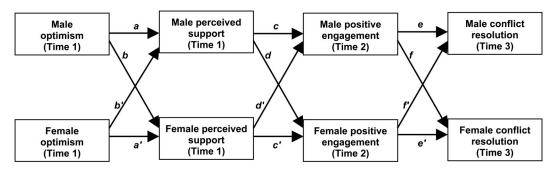


Figure 1. The full-mediation model for Part 2. Error variances are not shown; men's and women's error variances for the same measure were allowed to covary.

responded within that week, we contacted them a second and third time, via e-mail and phone. Through this procedure, we were able to obtain relationship status information from at least one member of 101 (94%) of the couples. Analyses showed that members of responding couples and non-responding couples did not differ significantly on measures of optimism or relationship satisfaction.

We asked all participants whether they were still in an exclusive dating relationship with their partner. Couples responding yes were coded as still together at 1 year (1), and couples reporting no were coded as having broken up (0). In the responding sample, 67 couples (66%) were still together at the 1-year follow-up, and 34 had broken up.

Results and Discussion

Did Optimism Predict Relationship Status at 1 Year?

We hypothesized that greater optimism would be associated with a higher probability of being together at a 1-year follow-up. To test this hypothesis, we performed a logistic regression with couple as the unit of analysis, using both male and female optimism to predict the couple's 1-year status. Greater male optimism predicted relationship survival, B = 0.03, Wald = 7.53, p = .006, but female optimism did not predict relationship survival, B = 0.01, Wald = 0.48, p = .49. To illustrate this effect, we split the couples into two groups according to the male optimism median and examined survival for each group. We found that 75% of couples with men at or above the median were still together at 1 year, contrasted with 54% of couples with men below the median.

Did Perceived Support Mediate the Effects of Optimism on Relationship Longevity?

To evaluate whether perceived support mediated the effect of optimism on relationship longevity, we added male and female perceived support as predictors in the logistic regression model. In this second model, male perceived support was a significant predictor, B = .06, Wald = 6.21, p = .01, the effect of male optimism was reduced, B = .02, Wald = 3.28, p = .07, and female optimism and perceived support were not significant predictors (ps > .75). We evaluated the reduction in the effect of male optimism by computing a bootstrap confidence interval for the difference between the male optimism effect in the first and second models; the confidence interval did not include a null effect, 95% CI = (.001, .024), consistent with mediation. The effects of men's optimism and perceived support remained significant when controlling for both partners' Extraversion, Neuroticism, and self-esteem.

Analyses controlling for relationship satisfaction were consistent with our main conclusions, though they yielded somewhat more complicated results. In a logistic regression in which men's and women's relationship satisfaction were the only predictors, there was a significant effect of men's relationship satisfaction, B = .04, Wald = 7.59, p = .006, but not of women's relationship satisfaction, B = -.01, Wald = 0.27, p = .61. In a regression that included both optimism and relationship satisfaction, there were significant effects both of men's optimism (p = .03) and men's relationship satisfaction (p = .03), indicating that men's relationship satisfaction did not account for the effect of men's optimism on longevity. When we ran the full mediational model with a control for relationship satisfaction, the results were in the generally expected direction but were not as clear as without the controls. In this analysis, neither men's nor women's relationship

satisfaction was a significant predictor of relationship longevity (ps > .42). The effect of men's perceived support was in the expected direction but was not statistically significant (p = .10). Given the sample size, it should perhaps not be surprising that in a model with six moderately intercorrelated predictors, the predicted effect was only marginally significant.

Part 3 showed that optimism is associated with an important social outcome: relationship survival. Intriguingly, this analysis showed a sex difference, with men's optimism being the important predictor; this was in contrast to the other analyses, which indicated that men's and women's optimism did not have different effects on perceived support, relationship satisfaction, or conflict resolution processes.

Why might male optimism play a more important role than female optimism in predicting relationship survival? One possible explanation has to do with the nature of men's and women's social support networks. A number of studies have suggested that men tend to rely more heavily on romantic partners for social support, whereas women tend to draw on a wider network of family and friends (e.g., Taylor et al., 2000; Voss, Markiewicz, & Doyle, 1999; Walen & Lachman, 2000). Thus, the tendency of male pessimists to perceive their partners as less supportive might be especially likely to produce shorter lived relationships, because for men, negative perceptions of their partners would implicate their entire support system and give them greater incentive to terminate the relationship.

General Discussion

In a longitudinal study of dating couples, we found that optimism was associated with better relationship outcomes in a number of domains. Part 1 found that optimists and their partners both experienced greater overall relationship satisfaction; Part 2 found that optimists and their partners saw themselves and each other as engaging more positively in the conflict and as reaching a better resolution; and Part 3 found that the relationships of male optimists lasted longer than the relationships of male pessimists. Furthermore, all of the relationship consequences of optimism were mediated by optimists' tendency to perceive their partners as supportive.

How Does Perceived Support Affect the Relational Environment?

Why should optimism be an asset in close relationships? This study provided some insight into why optimism may lead to more satisfying and longer lasting relationships by identifying perceived support as a mediator. Perceived support was hypothesized to be an important relational mediator because it creates a more adaptive relational environment. We believe that perceived support probably helps relationships in a variety of ways. First, optimists' tendency to perceive their partners as supportive may act as a buffer against negative attributions. Relationships in which individuals attribute their partners' negative behaviors to global, stable, voluntary dispositions rather than narrow and temporary inclinations tend to be marked by lower relationship satisfaction and other maladaptive outcomes (Bradbury & Fincham, 1990). Optimists may attribute specific instances of unsupportive or ambiguous behavior to temporary and situationally limited states. Second, optimists' positive views of their partners may prevent or interrupt cycles of negative reciprocity by refocusing optimists' attention on the constructive things that their partners do and say, instead of on their partners' negative affect (Gottman, 1998). Third, optimists may be better at acting as a "secure base" (Bowlby, 1988; Hazan & Shaver, 1987), providing their partners with a reliable source of support. As a result, optimists and their partners may be more satisfied because they feel that their relationship helps them pursue their personal goals (Brunstein et al., 1996; Kaplan & Maddux, 2002).

Optimism, Shared Reality, and Positive Illusions

Did optimists and their partners benefit from positive illusions (Taylor & Brown, 1988)? In conceptualizing this study, we have sidestepped questions about accuracy and bias, instead focusing on perceptions of support and on both partners' assessment of positive engagement and conflict resolution. Partners' beliefs and perceptions of themselves and each other define the shared reality of a relationship, a reality that is important independent of any objective analysis of accuracy (Gable et al., 2003). In support of the value of such an approach, Part 3 suggests that shared reality can have very real consequences for the long-term success of a relationship.

How might we apply a different perspective to our findings? Drawing on a positive illusions perspective, we could interpret the results in Part 1 as stemming from positive illusions that optimists hold about their relationships. In Part 2, we could conclude that such illusions drive optimists to practice and elicit "objectively" better conflict-related behavior; or alternatively, perhaps both partners share an illusion about how they handle conflict. We believe that the former interpretation is more compatible with other findings about positive illusions in close relationships (e.g., Murray & Holmes, 1997), though the present data cannot speak strongly to questions of illusion or accuracy.

Relatedly, perceived support may function as a self-fulfilling prophecy: By virtue of optimists' general tendency to see their partners as supportive, they may elicit actual support from their partners. That would explain why optimists report using social support as a coping strategy in general (Scheier, Carver, & Bridges, 1994) but not in response to specific, everyday stressors (Aspinwall & Taylor, 1992; Brissette et al., 2002): Optimists expect to receive support from others, but they do not directly ask for it.

Limitations and Future Directions

Throughout this article, we have adopted the perspective that optimism leads to perceived support, which leads to positive relationship outcomes. This was based in large part on theoretical considerations: We ordered the constructs from optimism, the most general and broad-based construct, to perceived support, which is more domain-specific but still fairly broad as an individual difference (Sarason et al., 1986), to outcomes relevant to a specific relationship (Part 1) or specific events within that relationship (Parts 2 and 3), which are the most contextual. There is also a temporal logic to the order of precedence: Optimism is a meaningful construct even for an individual who has no experience or beliefs about close relationships, and general perceptions of support can preexist specific experiences in relationships. In Part 2, this temporal ordering was reflected in the design of the study and

was strengthened by an analysis controlling for Time 1 levels of relationship satisfaction. In Part 3, relationship dissolution obviously is an outcome that temporally follows all other characteristics of the relationship.

The strengths of our naturalistic approach are balanced against the limitations of a nonexperimental design, however, and we acknowledge that this sequencing is not airtight. It could be argued, for example, that perceptions of support are a consequence, rather than a cause, of higher quality relationships (Metts, Geist, & Gray, 1994). From this perspective, individuals may form their perceptions of their partner's supportiveness based on some other aspect of the relationship. We partially addressed this concern by controlling for relationship satisfaction and other relationship characteristics in Part 2, but we cannot fully rule out the possibility that some other, unmeasured feature of the relationship acted as a third variable.

Our reliance on partners' reports about the conflict conversation in Part 2 might be regarded as a double-edged sword. As implied earlier, this approach gave us insight into the shared reality of the relationship, and the results showed that both self- and partner reports from both members of the couple led to the same conclusions about conversation processes. In fact, if an "objective" observer failed to corroborate the positive conversation processes evident in optimists' relationships, we might have cause to suspect the observer rather than the couple. Nevertheless, it would be interesting in future research to examine more objectively the specific processes that we believe are being promoted by optimists: adaptive attributions, interruption of cycles of negative reciprocity, and use of the relationship as a secure base. Such research would elucidate the mechanisms that link optimists' positive expectations to the fulfillment of these expectations.

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