

Impact of Couple Patterns of Problem Solving on Distress and Nondistress in Dating Relationships

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A theory of couple patterns of problem solving that involves the Rusbult and Zembrodt (1983) exit-voice-loyalty-neglect typology of problem-solving responses is advanced and tested in a sample of dating relationships. Destructive problem-solving responses (exit and neglect) were more powerfully predictive of couple distress/nondistress than were constructive problem-solving behaviors (voice and loyalty). Tendencies to react with voice to mild relationship problems were also significantly predictive of couple functioning. Partner perceptions of one another's problem-solving styles were also related to couple distress/nondistress: Distress was greater to the extent that individuals perceived that their partners exhibit greater tendencies to engage in exit and neglect while showing lower levels of voice and (perhaps) loyalty. Certain interdependent patterns of partner problem solving were effectively predictive of couple health: Couple distress was greater to the degree that individuals reacted destructively and failed to respond constructively when their partners engage in destructive problem-solving responses. Reactions to partners' constructive responses were less effectively predictive of couple functioning. Thus it is the way in which partners react in response to destructive behaviors from their partners that is best predictive of relationship health. Lastly, in comparison with men, women engage in somewhat higher levels of voice and loyalty, and may behave less neglectfully.

What determines whether a relationship will function successfully? Are certain couple patterns of problem solving more promotive of healthy functioning than others? One of the most important goals in the study of close relationships is to understand how couples react to inevitable, perhaps reparable, periodic decline and to identify the patterns of response that produce the most favorable consequences. Unfortunately, despite the abundance of theory and research devoted to understanding the development and deterioration of relationships (Altman & Taylor, 1973; Johnson, 1982; Lee, 1984; Levinger, 1979; Murstein, 1970; Rusbult, 1983), people still know relatively little about the form and effectiveness of various patterns of couple problem solving.

The classic model for identifying what "works" in relationships is to compare the behavior of partners in nondistressed relationships with comparable behavior in distressed relationships (Billings, 1979; Birchler, Weiss, & Vincent, 1975; Fiore & Swensen, 1977; Frederickson, 1977; Gottman, 1979; Gottman et al., 1976; Margolin & Wampold, 1981; Nettles & Loevinger, 1983; Schaap, 1984). This approach to the study of relationships is predicated on the assumption that the problem-solving behavior of nondistressed couples, in comparison with that of distressed couples, is reflective of healthy functioning. Unfortunately, very little of the prior work on distress/nondistress in close relationships is based on a larger, more comprehensive theory of problem solving.

According to Kelley (1979; Kelley et al., 1983), in formulating a comprehensive theory of relationships, one should take into consideration not only the behaviors of the individual partners

but also, and more importantly, the interdependence of the partners, or the impact of their joint behaviors on their relationship (Kelley & Thibaut, 1978). In addition, Kelley suggested that one take into consideration the types of attributions that the partners form about one another's dispositions. Accordingly, the theory of problem solving that we advance deals with three important components of close relationships: First, it addresses the simple effects of each individual's problem-solving responses on the quality of the relationship; second, it addresses the more complex effects of various interdependent patterns of problem-solving responses on relationship quality; and third, it enables one to explore the impact of partner perceptions of one another's problem-solving responses on relationship functioning. Our goal in developing such a theory is to understand the effects of each of these variables on the couple; that is, we use as the unit of analysis the relationship itself, rather than the individual partners. In our theory we use an extant typology of problem solving in close relationships with demonstrated utility: the exit-voice-loyalty-neglect typology (Rusbult & Zembrodt, 1983). This typology is a useful means of characterizing couple problem solving in that it is an abstract and comprehensive model that specifies the dimensions on which a variety of responses differ from one another.

The Exit-Voice-Loyalty-Neglect Typology

The Rusbult and Zembrodt (1983) typology is based loosely on the writings of Hirschman (1970), who discussed three characteristic reactions to decline in economic domains: (a) *exit*, actively destroying the relationship; (b) *voice*, actively and constructively attempting to improve conditions; and (c) *loyalty*, passively but optimistically waiting for conditions to improve. To assess the comprehensiveness of this model, Rusbult and Zembrodt (1983) carried out a multidimensional scaling analysis

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of couple problem-solving responses. They found that Hirschman's three categories characterize behaviors in romantic involvements, and also identified a fourth important response: *neglect*, passively allowing one's relationship to deteriorate. The following are examples of behaviors representative of each category of response:

Exit—separating, moving out of a joint residence, actively [physically] abusing one's partner, getting a divorce;

Voice—discussing problems, compromising, seeking help from a friend or therapist, suggesting solutions, changing oneself or one's partner;

Loyalty—waiting and hoping that things will improve, supporting the partner in the face of criticism, praying for improvement;

Neglect—ignoring the partner or spending less time together, refusing to discuss problems, treating the partner badly [insulting], criticizing the partner for things unrelated to the real problem, just letting things fall apart.

As is shown in Figure 1, the four responses differ from one another along two dimensions: Voice and loyalty are *constructive* responses, wherein the individual attempts to revive or maintain the relationship, whereas exit and neglect are relatively more *destructive*. *Constructiveness/destructiveness* refers to the impact of the response on the relationship, not on the individual. For example, exit is clearly destructive to the future of the relationship, though it may be a constructive thing for the individual to do for himself or herself. In addition, exit and voice are *active* responses, wherein the individual is doing something about the problem, whereas loyalty and neglect are more *passive* in regard to the problem situation. *Activity/passivity* refers to the impact of the response on the problem at hand, not to the character of the behavior itself. For example, storming out of the room involves overt activity, though it is passively neglectful in regard to a relationship problem, because it is a refusal to discuss problems.

Previous researchers have demonstrated that the four responses are influenced by a variety of relationship- and individual-level variables. For example, satisfaction, investments, alternatives, and problem severity are several qualities of relationships that have been shown to influence response mode (Rusbult, Johnson, & Morrow, in press; Rusbult, Zembrodt, & Gunn, 1982). Also, several individual-level qualities—gender, psychological masculinity and femininity, self-esteem, and a variety of demographic characteristics (e.g., age, education)—influence problem-solving tendencies (Rusbult, Johnson, & Morrow, in press; Rusbult, Morrow, & Johnson, 1985; Rusbult, Zembrodt, & Iwaniszek, in press). Unfortunately, none of this research answers the question “What ‘works’ in relationships?” If the typology is to serve as a useful model of problem solving, the adaptive value of the four responses must be empirically established.

A Model of Problem Solving in Distressed Relationships

What implications does the prior work on distressed and non-distressed relationships have for understanding the functional value of exit, voice, loyalty, and neglect responses? First, previous researchers have demonstrated that partners in distressed couples react more positively and less negatively to problems: Billings

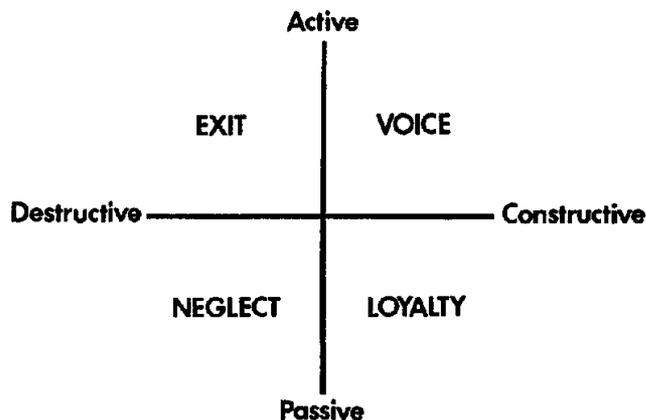


Figure 1. Exit, voice, loyalty, and neglect: a typology of problem-solving responses in close relationships.

(1979) found that in comparison with nondistressed couples, distressed couples exhibit more negative and fewer positive problem-solving acts (e.g., more hostile-dominant, rejecting, and coercive-attacking behaviors, and fewer friendly-dominant behaviors). Similarly, distressed couples have been shown to deliver more negative and fewer positive reinforcements and to engage in more conflicts and fewer joint recreational activities (Birchler et al., 1975), to emit lower rates of verbal and nonverbal positive behaviors (Hahlweg et al., 1984; Margolin & Wampold, 1981; Schaap, 1984), to be more reciprocally negative and coercive (Raush, Barry, Hertel, & Swain, 1974), and to express less affection, support, and encouragement (Fineberg & Lowman, 1975; Fiore & Swensen, 1977). In light of the consistency of these findings, we predict that couple distress will be greater to the degree that partners exhibit higher levels of the destructive problem-solving responses and lower levels of the constructive responses. We should find that distress is greater in relationships in which couples respond to problems in an abusive manner, threatening to end their relationships (i.e., exiting), or by refusing to discuss problems, ignoring the partner, spending less time together, and so on (i.e., engaging in neglect). In contrast, distress should be lower to the extent that partners compromise, suggest solutions to problems, and talk things over (i.e., voice), or quietly but optimistically wait for things to improve (i.e., remain loyal).

Previous researchers have also demonstrated that interdependent patterns of response may distinguish between well- and poorly functioning couples. Though research is inconsistent in demonstrating the importance of patterns of interdependence, those researchers whose projects have revealed such differences have found that distressed couples evince greater reciprocity of negative affect, communications, and behaviors (Billings, 1979; Gottman et al., 1976; Margolin & Wampold, 1981; Schaap, 1984; Wills, Weiss, & Patterson, 1974). In the language of interdependence theory (Kelley & Thibaut, 1978), distressed couples appear to engage in fewer prorelationship “transformations” of the problem situation, and thus react to destructive actions from partners with destructive responses in return. Thus we predict that couples will evince greater distress to the degree that partners reciprocate negative problem-solving responses, reacting to exit and neglect from partners with higher levels of exit and neglect in return.

Previous researchers have also demonstrated that partners in well- and poorly functioning couples may perceive one another's behaviors quite differently. Some research has shown that distress is a function not so much of how partners intend their behaviors as it is a function of how they experience one another's behaviors (Gottman, 1979; Gottman et al., 1976; Markman, 1979, 1981). Thus the prediction advanced earlier about individual response tendencies may also apply to *perceptions* of partner behaviors; partners in distressed couples may *receive* one another's responses more negatively, attributing to one another greater tendencies toward exit and neglect and lesser tendencies toward voice and loyalty.

Lastly, in light of prior work on the differences in problem-solving responses of men and women, we expected to uncover some gender differences in response style. On the basis of previous research, we can characterize the behavior of women, in relation to that of men as showing greater direct communication, a more contactful and less controlling style, greater emphasis on maintenance behavior, a desire to confront and discuss problems and feelings, lesser tendencies toward conflict-avoidance, a greater desire for affectional behaviors and a lesser emphasis on instrumental behaviors, and higher levels of intimate self-disclosure (Hawkins, Weisberg, & Ray, 1980; Kelley et al., 1978; Kitson & Sussman, 1982; Morgan, 1976; Rubin, Hill, Peplau, & Dunkel-Schetter, 1980). Given the woman's generally greater affiliative/communal orientation, we predicted that in comparison with men, women will evince greater tendencies to respond constructively and lesser tendencies to respond destructively to relationship problems.¹

As a preliminary test of the current model, we obtained information, from both members of dating couples, regarding (a) self-reports of response tendencies; (b) perceptions of partner's response tendencies; (c) reports of probable reactions to exit, voice, loyalty, and neglect from partner (i.e., interdependent patterns); and (d) reported satisfaction with and commitment to relationship, liking and loving for partner, and perceived effectiveness of own and partner's pattern of problem-solving. Furthermore, in light of the Gottman et al. (1976) argument that high-conflict situations may be a better means of evaluating the adaptive value of problem-solving responses, we examined interdependent patterns of response for both mild and serious relationship problems.

Method

Respondents

The respondents were 68 dating couples from the University of Kentucky. One member of each couple completed the questionnaire during an on-campus research session in partial fulfillment of the requirements for introductory psychology, and was asked to take a packet of materials to his or her partner. This packet included an identical questionnaire (coded with the same number as on that of the first partner's), a cover letter explaining the purpose of the study, and a stamped return envelope. In the cover letter we asked that individuals complete and return their questionnaires without showing them to their partners, and we assured them that their partners would not be privy to their responses.

The respondents were approximately 20 years old, 21 for male subjects (range = 17 to 36) and 19 for female subjects (range = 17 to 26), had been involved with one another for about 18 months (range = 2 to 66 months), spent about 3 or 4 evenings a week together (range = 1 to 7),

and were in one another's company for about 37 hours per week (range = 2 to 110). Seventy-eight percent reported that they were dating regularly, 12% were engaged to be married, and 10% reported that they were dating casually. Eighty-two percent reported that neither partner dated others, 5% reported that one partner dated others and the other partner did not, and 13% reported that both partners dated other persons as well. Ninety-eight percent of the respondents were white.

Questionnaires

In addition to the demographic information mentioned earlier, each questionnaire also enabled us to assess the following:

Self-reported responses and perceptions of partner's responses. Each respondent completed a 28-item scale in order to measure his or her own self-reported tendencies to engage in exit, voice, loyalty, and neglect. Each of the seven items designed to measure each response category was a 9-point Likert-type scale (1 = *never do this*; 9 = *always do this*). Items from the four response categories were randomly ordered in the questionnaire. The verbatim items were as follows:

Exit—"When I'm unhappy with my partner, I consider breaking up," "When I'm angry at my partner, I talk to him/her about breaking up," "When we have serious problems in our relationship, I take action to end the relationship," "When I'm irritated with my partner, I think about ending our relationship," "When we have problems, I discuss ending our relationship," "When things are going really poorly between us, I do things to drive my partner away," and "When I'm dissatisfied with our relationship, I consider dating other people."

Voice—"When my partner says or does things I don't like, I talk to him/her about what's upsetting me," "When my partner and I have problems, I discuss things with him/her," "When I am unhappy with my partner, I tell him/her what's bothering me," "When things aren't going well between us, I suggest changing things in the relationship in order to solve the problem," "When my partner and I are angry with one another, I suggest a compromise solution," "When we've had an argument, I work things out with my partner right away," and "When we have serious problems in our relationship, I consider getting advice from someone else (friends, parents, minister, or counselor)."

Loyalty—"When we have problems in our relationship, I patiently wait for things to improve," "When I'm upset about something in our relationship, I wait awhile before saying anything to see if things will improve on their own," "When my partner hurts me, I say nothing and simply forgive him/her," "When my partner and I are angry with each other, I give things some time to cool off on their own rather than take action," "When there are things about my partner that I don't like, I accept his/her faults and weaknesses and don't try to change him/her," "When my partner is inconsiderate, I give him/her the benefit of the doubt and forget about it," and "When we have troubles, no matter how bad things get I am loyal to my partner."

Neglect—"When I'm upset with my partner I sulk rather than confront the issue," "When I'm really bothered about something my partner has done, I criticize him/her for things that are unrelated to the real problem," "When I'm upset with my partner, I ignore him/her for awhile," "When I'm really angry, I treat my partner

¹ We advance this prediction despite evidence that women are more likely than men to actually terminate relationships (Hagistad & Smyer, 1982; Hill, Rubin, & Peplau, 1976). Not all relationships terminate, and termination is but one form of exit (others being thinking about leaving, threatening to leave, etc.); there are many ways to exit other than actually ending one's relationship, and actual termination is a relatively low-frequency response. Given the large body of literature suggesting that women are generally more oriented toward maintenance, it seems reasonable to expect that in general men will engage in less constructive and greater destructive responding.

badly (for example, by ignoring him/her or saying cruel things),” “When we have a problem in our relationship, I ignore the whole thing and forget about it,” “When I’m angry at my partner, I spend less time with him/her (for example, I spend more time with my friends, watch a lot of television, work longer hours, etc.),” and “When my partner and I have problems, I refuse to talk to him/her about it.”

We assessed individuals’ perceptions of their partners’ problem-solving responses, using the same items, reworded to describe partner’s rather than own response tendencies (e.g., “When I say or do things my partner doesn’t like, he/she talks to me about what’s upsetting him/her”).

Interdependent patterns of response. Twenty open-ended items were designed to enable us to assess response tendencies in reaction to partner’s exit, voice, loyalty, and neglect.² Respondents wrote brief (one-sentence) responses to statements of the form “If we had a minor problem in our relationship and my partner wanted to ignore it, I would probably. . . .” These responses were coded for exit, voice, loyalty, and neglect content (e.g., 0 = *no exit*, 1 = *some exit*) by two judges naive to each couple’s distress level. Five statements enabled us to assess reactions to each type of partner response: Three concerned minor problems, two concerned serious problems. The 20 statements were randomly ordered. The statements for each response category are as follows (minor problems followed by serious problems):

Exit—“If my partner was irritated by something I had done and started dating someone else, I would probably. . . .”; “If we had a minor problem in our relationship and my partner thought about ending our relationship, I would probably. . . .”; “If my partner was annoyed by one of my personal habits and quit seeing me for awhile, I would probably. . . .”; “If we had a really serious problem in our relationship and my partner began to talk about ending our relationship, I would probably. . . .”; and “If my partner was seriously unhappy about something in our relationship and wanted to break up, I would probably. . . .”

Voice—“If my partner was irritated by something I had done and wanted to have a heart-to-heart talk about it, I would probably. . . .”; “If we had a minor problem in our relationship and my partner wanted to talk it over, I would probably. . . .”; “If my partner was annoyed by one of my personal habits and talked to me about how he/she felt, I would probably. . . .”; “If my partner was seriously unhappy about something in our relationship and really tried to solve the problem, I would probably. . . .”; and “If we had a really serious problem in our relationship and my partner tried hard to work things out, I would probably. . . .”

Loyalty—“If my partner was annoyed by one of my personal habits and graciously tried to live with it rather than trying to change me, I would probably. . . .”; “If my partner was irritated by something I had done and just waited patiently for it to pass away, I would probably. . . .”; “If we had a minor problem in our relationship and my partner wanted to just let the problem naturally go away over time, I would probably. . . .”; “If we had a really serious problem in our relationship and my partner stood by me through thick and thin, I would probably. . . .”; and “If my partner was seriously unhappy about something in our relationship and quietly waited for the problem to solve itself, I would probably. . . .”

Neglect—“If we had a minor problem in our relationship and my partner wanted to ignore it, I would probably. . . .”; “If my partner was annoyed by one of my personal habits and started to treat me badly (ignoring me or saying cruel things), I would probably. . . .”; “If my partner was irritated by something I had done and began to criticize me for lots of other things (things not related to the problem), I would probably. . . .”; “If my partner was seriously unhappy about something in our relationship and just started to let our relationship fall apart, I would probably. . . .”; and “If we had a really serious problem in our relationship and my partner began to ignore me and spend less time with me, I would probably. . . .”

On the basis of these data, we calculated six dependent measures for each response: response to mild problems (e.g., total voice for the 12 mild-problem statements), response to severe problems (e.g., total loyalty for the eight severe problems), and response to exit, voice, loyalty, and neglect from partner (e.g., total neglect in response to the five partner-voice problems). The response to mild and severe problems measures were used as additional measures of individual response tendencies.

Distress measures. The questionnaire also included Rubin’s (1973) liking and loving instrument, a set of 18 items to which respondents indicated degree of disagreement/agreement on 9-point Likert-type scales (1 = *don’t agree at all*, 9 = *agree completely*). Using Rusbult’s (1983) items, we measured satisfaction with and commitment to maintain relationships. Five 9-point Likert-type scales enabled us to measure each construct (e.g., for satisfaction, “To what extent are you satisfied with your current relationship?” and “How does your relationship compare to other people’s?”; for commitment, “To what extent are you committed to maintaining your relationship?” and “For how much longer do you want your relationship with your partner to last?”). In addition, we assessed participants’ perceptions of the effectiveness of their own and their partners’ problem-solving styles, using eight 9-point Likert-type scales. The items with which we assessed perceived effectiveness of participants’ own behaviors were “Do you think that *your* method of solving problems works?”; “Do you think that *you* respond to problems in your relationship in a healthy manner?”; “Does *your* method of solving problems make you feel good afterwards?”; and “Does the way in which *you* react to periods of dissatisfaction make your relationship stronger?” We used the same items, reworded appropriately, to assess participants’ perceptions of the effectiveness of their partners’ problem-solving behaviors (e.g., “Do you think that *your partner’s* method of solving problems works?”).

Socially desirable responding. Respondents also completed the Marlowe-Crowne (Crowne & Marlowe, 1964) instrument, designed to enable us to assess tendencies to describe oneself in a socially desirable manner.

Results

Reliability of Measures

We calculated reliability coefficients to evaluate the internal consistency of the items designed to measure each construct. These analyses revealed sizable alphas for the measures of self-reported tendencies toward exit (.91), voice (.72), loyalty (.53), and neglect (.76) and of perception of partner’s tendencies toward exit (.87), voice (.76), loyalty (.62), and neglect (.82), and for the measures of satisfaction (.88), commitment (.90), liking (.90), love (.87), and perceived effectiveness of own (.85) and partner’s style (.91) of problem-solving. Also, the Kuder-Richardson reliability coefficient for the social desirability items was substantial (.79). In addition, we assessed the reliability of our judges’ ratings of the open-ended responses by calculating percentage of agreement and gamma for their judgments of exit, voice, loyalty, and neglect content for each of 20 statements (total of 80 relationships). The median percentage of agreement was .99 for the 20 exit ratings (range .89 to .99; median $\gamma = 1.00$), .96 for the 20

² In the 20 statements, problems were described in relatively abstract terms, our goal being to assess reactions to problems that partners would likely encounter; for example, “If my partner was irritated by something I had done. . . .” (mild problem), “If my partner was seriously unhappy about something. . . .” (severe problem). Similarly, in the statements we described partner responses in relatively abstract terms, the goal being to assess reactions to partner responses that individuals would likely encounter; for example, partner “wanted to have a heart-to-heart talk” (voice), “began to ignore me and spend less time with me” (neglect).

voice ratings (.88 to .99; median $\gamma = 1.00$), .88 for the 20 loyalty ratings (.77 to .96; median $\gamma = .94$), and .91 for the 20 neglect ratings (.75 to .99; median $\gamma = .94$).

Validity of Exit, Voice, Loyalty, and Neglect Measures

To assess the validity of our measures of problem solving, we calculated the correlation between respondents' descriptions of their own tendencies to react to problems with exit, voice, loyalty, and neglect, and partners' descriptions of the individual's tendencies. These analyses provided fairly good evidence of convergence: The correlations were .53 for exit, .34 for voice, .30 for loyalty, and .42 for neglect. Also, the relation between self-reported tendencies toward exit, voice, loyalty, and neglect and the total coded measure of each response tendency (mild plus severe) from the open-ended items were significant for exit (.48), voice (.35), loyalty (.28), and neglect (.39).

We also assessed the relation between tendencies toward socially desirable responding and the several measures of each response. The median correlation with socially desirable responding was $-.12$ for the several exit measures (range from $-.15$ to $-.02$), $.22$ for voice (.13 to .34), $.01$ for loyalty ($-.17$ to .13), and $-.18$ for neglect ($-.15$ to $-.23$). Thus our measures appear to be valid and minimally related to socially desirable responding.

Distress Measure

We calculated a total distress score for each respondent by summing his or her reported satisfaction, commitment, liking, loving, and perceived effectiveness of own and partner's problem-solving style (each measure first scaled from 1 to 9). Then we assessed the item-total correlations between the distress score and each of its several component measures. The median correlation between the composite score and the six components was .79 for male subjects (range .60 to .91) and .72 for female subjects (range .61 to .80). Then we calculated the zero-order correlation between male and female partners' composite distress scores ($r = .54$).³ Lastly, we calculated a single distress score for each couple by summing male and female partners' reported distress. This composite score captures the feelings of both partners, and should be a valid means of assessing couple distress/nondistress.⁴

Relation Between Problem-Solving Responses and Distress/Nondistress

We tested predictions concerning the effects of exit, voice, loyalty, and neglect by performing multiple regression analyses wherein the various measures of each response were regressed onto couple distress/nondistress. The results of these analyses are summarized in Table 1.

Impact of individual responses. In the regression models in which we used measures of self-reported response tendencies and measures of responses to both mild and severe problems, both exit and neglect were consistently negatively predictive of couple distress/nondistress. Thus the prediction that destructive tendencies would be deleterious to couple functioning was strongly supported. However, although the tendency to voice in reaction to mild problems was associated with nondistress, voice did not contribute to the prediction of distress/nondistress for

models in which we used the measures of self-reported tendencies or responses to severe problems. Furthermore, there was no evidence that loyalty responses contributed to the prediction of couple functioning.

To further examine the power of each mode of response in predicting couple functioning, we performed additional analyses in which we regressed the three measures of each response onto overall couple nondistress. The percentage of variance accounted for by each set was as follows: 38% for the three exit measures, 19% for the voice measures, 0% for the loyalty measures, and 30% for the neglect measures. As a conservative test of differences in predictive power, we systematically added to each model the three measures of the next most powerful response and calculated *F*s representing the resultant change in percentage of variance accounted for. These analyses revealed that the exit, voice, and neglect measures significantly improved the prediction of nondistress beyond that accounted for by loyalty; for the weakest improvement (voice), $F(6, 119) = 5.20, p < .01$. Also, both the exit and voice measures improved the prediction of nondistress beyond that accounted for by voice; for the weakest improvement (neglect), $F(6, 119) = 3.82, p < .01$. Lastly, the exit measures improved the prediction of nondistress beyond that accounted for by neglect, $F(6, 119) = 4.96, p < .01$.

Impact of perceptions of partner responses. As predicted, the multiple regression analysis demonstrated that perceptions of partners' tendencies toward exit, voice, and neglect contributed significantly, and perceptions of loyalty contributed marginally, to the prediction of nondistress (see Table 1). Thus there is some evidence that perceptions of partner voice (and perhaps loyalty) do contribute to our understanding of couple functioning, though the analyses of individual response tendencies revealed only weak evidence of such effects.

Impact of interdependent patterns of response. According to our model, couple distress will be greater to the degree that persons react to destructive responses from partners with destructive responses in return. Using data from the open-ended measures of interdependent responses to test this prediction, we found that nondistress was negatively associated with tendencies to respond to partner's exit with exit and neglect (though the latter coefficient was only marginally significant), and with tendencies to respond to partner's neglect with exit and neglect (see Table 1). But tendencies to react with voice and loyalty to partner's exit were also significantly related to nondistress, as were voice reactions in response to partner's neglect. However, although the coefficient

³ Correlations between partners' scores on traditional marital satisfaction inventories (cf. Locke & Wallace, 1959) are typically .80 or thereabouts. Our .54 correlation may be lower than that criterion because (a) our measures were fairly general and abstract, whereas items in traditional marital satisfaction inventories (e.g., the Locke-Wallace) are relatively more concrete; (b) respondents in our study were involved in dating relationships that were relatively less exclusive and more short term; and (c) our distress/nondistress measure was multidimensional, enabling us to assess not just satisfaction, but also liking, love, commitment, and feelings about problem-solving styles, whereas traditional marital satisfaction scales enable one to assess only satisfaction.

⁴ The distress/nondistress measure was not significantly correlated with age, duration of relationship, evenings or hours per week spent with partner, status of relationship, or exclusiveness. Thus the effects to be discussed are not mere artifacts of the indirect effects of any of these variables.

Table 1
Relationship Between Tendencies to Engage in Exit, Voice, Loyalty, and Neglect and Couple Distress/Nondistress: Multiple Regression Analyses

Subject responses	Exit	Voice	Loyalty	Neglect	Multiple R
Individual tendencies					
Self-reported responses	-.528*** _a	.048 _c	-.020 _{bc}	-.175** _b	.654***
Responses to mild problems	-.176** _a	.540*** _c	.074 _b	-.212*** _a	.438***
Responses to severe problems	-.179** _{ab}	-.062 _b	-.051 _b	-.346*** _a	.412***
Perceptions of partner's responses	-.381*** _a	.148** _b	.114* _b	-.194** _a	.614***
Interdependent patterns of responses					
Response to partner's exit	-.190** _a	.190** _b	.183** _b	-.124* _a	.382***
Response to partner's voice	-.112 _{ab}	.118 _b	.063 _{ab}	-.120 _a	.294*
Response to partner's loyalty	.033 _{ab}	.285*** _b	-.050 _a	.038 _a	.307*
Response to partner's neglect	-.164** _a	.204** _b	-.002 _{ab}	-.153** _a	.388***

Note. Values in the exit, voice, loyalty, and neglect columns are the standardized regression coefficients for each response category for the regression model in which we used each row's mode of measurement. Higher numbers indicate greater tendencies toward exit, voice, loyalty, and neglect, as well as more healthy functioning (nondistress). Reported significance levels for individual regression coefficients are one-tailed tests ($df = 1, 124$), levels for overall regression models are two-tailed tests ($df = 4, 121$). Regression coefficients with different subscripts differ from one another at $p < .05$.

* $p < .10$, marginal. ** $p < .05$. *** $p < .01$.

for voice tendencies in response to partner's loyalty was significant, the overall regression models for reactions to partners' constructive responses (voice and loyalty) were only marginally predictive of couple nondistress. In general, then, we find that couple distress is associated not only with tendencies to reciprocate destructive responses, but also with failure to respond constructively to destructive partner responses.

As a conservative test of the differences among these models, we systematically added to each model the four measures from every other model and calculated F s representing the resultant change in percentage of variance accounted for. We obtained fairly good evidence that individuals' responses to their partners' destructive behaviors are significantly more powerful in predicting nondistress than are responses to partners' constructive behaviors: Reactions to partners' exit significantly increased the percentage of variance in nondistress accounted for when added to the model of reactions to partner's voice, $F(8, 117) = 2.09, p < .05$, and when added to the model of reactions to partner's loyalty, $F(8, 117) = 2.35, p < .05$. The measures of responses to partner's neglect significantly increased the percentage of variance accounted for by the model of responses to partner's loyalty, $F(8, 117) = 2.11, p < .05$, and marginally increased the percentage of variance accounted for by the model of responses to partner's voice, $F(8, 117) = 1.78, p < .10$. Models in which we added measures of responses to partner's voice or loyalty to existing models including measures of responses to partner's exit or neglect did not significantly change the percentage of variance accounted for.

Gender Differences

Gender differences in the relationships between problem-solving responses and couple distress/nondistress. To determine whether the aforementioned relations between problem-solving responses and couple distress/nondistress hold for both male and female subjects, we performed hierarchical regression analyses including, in each model, both main effect terms for each response category

and Gender \times Response Category interaction terms (male subjects = 1; female subjects = 0). In Stage 1 we entered the overall terms for each response category (i.e., the main effects for exit, voice, and so on, regardless of gender), and in Stage 2 we entered the Gender \times Response Category interaction terms (i.e., Gender \times Exit, and so on, or terms representing male subjects' tendencies to engage in each response; cf. Cohen & Cohen, 1975). In these analyses, significant regression coefficients for Stage 2 interaction terms indicate a gender difference in the relation between a given response and the criterion measure of nondistress.⁵ First, we found that female subjects' tendencies to engage in exit exerted a more deleterious impact on couple functioning than did male subjects' exit tendencies: The exit and Gender \times Exit terms in our regression models revealed that female subjects' exit responses were more strongly negatively related to couple nondistress than were those of male subjects in the models for self-reported responses ($\beta = -.650$ for female subjects, $-.416$ for male subjects), $F(1, 124) = 4.55, p < .05$, responses to mild problems ($\beta = -.253$ for female subjects, $-.088$ for male subjects), $F(1, 124) = 4.57, p < .05$, responses to partner's exit ($\beta = -.200$ for female subjects, $-.147$ for male subjects), $F(1, 124) = 3.44, p < .10$, and responses to partner's neglect ($\beta = -.397$ for female subjects, $.003$ for male subjects), $F(1, 124) = 8.28, p < .05$. Second, female subjects' tendencies to engage in neglect were more destructive to the relationship in terms of their responses to severe problems ($\beta = -.569$ for female subjects, $-.319$ for male subjects), $F(1, 124) = 4.67, p < .05$, and responses to partner's voice ($\beta = -.470$ for female subjects, $-.053$ for male subjects), $F(1, 124) = 4.79, p < .05$. Thus the destructive behaviors

⁵ In this type of regression analysis, the exit beta is the standardized regression coefficient for female subjects, and the exit beta minus the Gender \times Exit beta is the coefficient for male subjects. The same method of calculation applies, of course, for the voice, loyalty, and neglect terms in the model. We report these calculated female and male betas in this section of the results.

Table 2
*Gender Differences in Tendencies to Engage in Exit,
 Voice, Loyalty, and Neglect*

Subject responses	Men	Women	F
Exit			
Self-reported responses	17.26	18.86	0.88
Responses to mild problems	1.84	1.56	0.42
Responses to severe problems	1.87	2.03	0.11
Multivariate			1.01
Voice			
Self-reported responses	41.74	45.22	6.19**
Responses to mild problems	15.69	17.70	6.48**
Responses to severe problems	11.23	11.92	1.84
Multivariate			3.36**
Loyalty			
Self-reported responses	37.26	37.13	0.01
Responses to mild problems	5.07	6.11	4.43**
Responses to severe problems	3.67	5.17	19.16***
Multivariate			7.63***
Neglect			
Self-reported responses	23.50	22.63	0.40
Responses to mild problems	5.35	4.08	3.54*
Responses to severe problems	1.94	1.35	4.03**
Multivariate			1.55

Note. Table values listed for the men and women columns are mean levels of each response for each group; higher numbers indicate greater tendencies toward each response. The possible range for self-reported responses was from 9 to 63, the range for responses to mild problems was from 0 to 24, and the range for responses to severe problems was from 0 to 16. Table values listed for the *F* column are univariate ($df = 1, 67$) and multivariate ($df = 3, 65$).

* $p < .01$, marginal. ** $p < .05$. *** $p < .01$.

of female partners (exit, and perhaps neglect) appear to be particularly deleterious to couple functioning.

Gender differences in mean level of problem-solving responses. To assess gender differences in response tendencies, we performed four two-factor multivariate analyses of variance, using couple as a blocking factor and using self-reported responses, responses to mild problems, and responses to severe problems as dependent variables.⁶ The results of these analyses are summarized in Table 2. As predicted, females engaged in higher levels of voice than did their male partners: The multivariate *F* for this analysis was significant, as were two of three univariate *F*s (the third univariate effect was not significant).⁷ Female subjects also engaged in greater loyalty than did their male partners, which was consistent with predictions: The multivariate *F* and two of three univariate *F*s were statistically significant. Lastly, as predicted, female subjects evinced somewhat lower neglect scores than did male subjects: The multivariate *F* for this analysis was not statistically significant, but one univariate *F* was significant and one was marginally significant. However, there was no evidence of significant gender differences in tendencies toward exit.

Discussion

The results of this study provide good support for the predictions advanced in our model. First, we found that couples evince poorer functioning to the extent that partners report that they engage in higher levels of destructive responses (i.e., exit and neglect). However, there was no evidence of any link between

couple functioning and tendencies to respond to problems with loyalty, and only weak evidence that voice affects couple functioning (voice contributed significantly to predicting nondistress only for mild problems). Thus it appears that the destructive problem-solving responses may be more powerful determinants of couple functioning than are the constructive responses. It is not so much the good, constructive things that partners do or do not do for one another that determines whether a relationship "works" as it is the destructive things that they do or not do in reaction to problems. Why might this be so? We entertain three possible explanations: First, the constructive responses may be more congruent with individuals' schemata for close relationships. If individuals expect their partners to behave well, then constructive responses may be taken for granted; constructive behavior, being the norm, gains one no benefits. Second, there may be an affective asymmetry in the impact of the various responses, destructive responses producing far more negative affect than constructive responses produce positive affect. Third, the responses may be differentially salient; destructive responses may simply be more cognitively salient than their constructive counterparts. These speculations remain to be further explored.

Second, we found that couples evince greater health to the degree that partners attribute to one another greater constructive and lesser destructive problem-solving style. Thus in a result that is consistent with the work of Gottman and his colleagues (Gottman, 1979; Gottman et al., 1976; Markman, 1979, 1981), we find that the actual impact of partners' actions is critical in determining how well the relationship functions. Interestingly, the perception that one's partner engages in voice and is loyal (though the loyalty effect was only marginal) contributes to couple functioning, whereas other measures of loyalist tendencies bear no significant relation to couple health, and voice contributes to couple functioning only in response to mild problems.

Third, we found that certain interdependent patterns of couple response distinguish between well- and poorly functioning couples. In accordance with predictions, tendencies to behave destructively (with exit or neglect) in reaction to destructive problem-solving behaviors from partners (exit or neglect) were especially powerful in enabling us to predict level of distress/nondistress (though the impact of neglect in response to partner's exit was only marginal). In addition, distress is greater to the degree that individuals react to partners' exit and neglect with voice, and react to partners' exit with loyalty. However, the models wherein we attempted to predict couple distress/nondistress on

⁶ The four measures of interdependent patterns of partner responding were not included in the multivariate analyses because they are, of course, completely colinear with the measures of responses to mild and severe problems.

⁷ For the analyses in which we observed significant multivariate *F*s for a given response category—for voice and loyalty tendencies—we conducted follow-up univariate analyses, using couple as a blocking factor and using the measures of interdependent patterns of responding as dependent measures. The female subjects' greater tendency toward voice was most pronounced for voice in response to partner's voice, $F(1, 67) = 4.39, p < .05$, and voice in response to partner's loyalty, $F(1, 67) = 9.50, p < .01$. The women's greater tendency toward loyalty was most notable for loyalty in response to partner's exit, $F(1, 67) = 16.49, p < .01$, and loyalty in response to partner's neglect, $F(1, 67) = 12.49, p < .01$. No other effects were statistically significant.

the basis of reactions to partners' voice and loyalty were only marginally predictive of overall couple functioning (though tendencies to voice in response to partners' loyalty were, individually, significantly predictive of nondistress). Together, these findings suggest that a critical issue in solving problems in relationships may be the manner in which individuals react to destructive responses from their partners: Distress is greater to the extent that partners react destructively and fail to react constructively when their partners behave in ways that might be destructive to their relationship. Reactions when partners are behaving well (i.e., constructively) are not as effectively predictive of couple health.

Lastly, we found some support for hypotheses regarding gender differences in problem solving. In comparison with their male partners, female subjects were more likely to engage in voice and loyalty, and were somewhat less likely to engage in neglect (the latter effect was weak and inconsistently observed, however). The result of sex role socialization may be to teach women to attend more closely to the social-emotional domain, encouraging them to behave in ways that should promote healthy functioning in relationships. In contrast, men learn to attend to the instrumental domain, and are more likely to ignore or not wish to attend to interpersonal matters (i.e., engage in neglect). It is interesting to note that those behaviors at which women excelled—voice and loyalty—have much less impact on the functioning of the relationship; though women are very "good" at engaging in constructive responses, these response tendencies have very little impact on the quality of their relationships.

We found some evidence of gender differences in the aforementioned relations between problem-solving responses and couple functioning. Specifically, though we advanced no predictions in this regard, we found that the female subjects' tendencies to engage in exit are more damaging to the relationship than were their partners' exit tendencies. Also, there was a weak tendency for the female subjects' neglect tendencies to be more deleterious to the health of the relationship. Why are the women's destructive responses, particularly exit, more harmful to the relationship than are those of the male subjects? This may be due to absolute differences between men and women in mean level of each form of problem solving. Recall that in comparison with women, men are less likely to attempt to solve problems through the constructive reactions of voice and loyalty, and are somewhat more likely to engage in neglect. When his female partner engages in destructive behaviors—exit or neglect—the man is thus somewhat less likely than his partner would be under similar circumstances to help matters by engaging in voice or loyalty or by avoiding neglect. Under such circumstances, then, we may observe a pattern whereby the woman's destructive behaviors are not compensated for by adaptive partner reactions, and thus exert a strongly destructive effect on the couple's functioning. Also, it may be, because the woman generally shows greater tendencies toward constructive responding, that when she does behave destructively, it is a sign of serious trouble. However, this line of reasoning is clearly speculative, and remains to be further explored.

In addition, we should comment on the Gottman et al. (1976) argument that high-conflict situations may be a better means of distinguishing between distressed and nondistressed couples' problem-solving styles. In our investigation, we found that exit

and neglect are harmful when one deals with both mild and severe relationship problems, and that voice promotes relationship health when one deals with mild problems. We found no evidence that severe relationship problems (i.e., high-conflict situations) were superior in enabling us to discriminate between well- and poorly functioning couples (the multivariate *R*s were .44 for mild problems and .41 for severe problems).

Before concluding, we note some of the strengths and weaknesses of this work. The most critical weakness concerns the validity of our measures. Specifically, our measure of couple distress is based entirely on self-reported feelings regarding partners and relationships. In the classic studies of distress/nondistress, distressed and nondistressed couples differ in terms of both counseling status and in terms of standard measures of marital satisfaction (cf. Billings, 1979; Birchler et al., 1975; Gottman et al., 1976). The critical question in assessing the validity of our measure of distress is "What defines healthy functioning?" Is the critical issue how the partners feel about one another? If so, several of our distress component measures (i.e., liking, love, satisfaction) have been shown to be essential components of partners' affective reactions to one another (cf. Rubin, 1973; Rusbult, 1983). Is the critical issue whether the relationship persists? If so, the commitment component of our distress measure has been shown to be powerfully predictive of long-term stability in relationships (cf. Rusbult, 1983). Thus we feel that our distress measure is a valid one. Furthermore, if our couple distress measure was not as sensitive as it could have been, the strength and consistency of our findings suggest that these effects are especially powerful and robust. Nevertheless, it would be fruitful to replicate this work, using a sample of married couples and using the traditional means of differentiating between distressed and nondistressed couples: counseling status.

A second drawback concerns the validity of our exit, voice, loyalty, and neglect measures. These measures were based entirely on verbal report: responses to Likert-type scales or responses to open-ended statements. It is possible that verbal reports bear little relation to actual problem-solving behaviors. However, two aspects of our findings are comforting in this regard: First, the various measures of individual response tendencies were significantly correlated with one another. Second, the fact that we obtained a relatively complicated, yet consistent, pattern of results—wherein constructive responses were not always positively related to couple functioning and destructive responses were not always negatively related to couple functioning—suggests that our findings do not result from artifacts of self-report such as positive response bias. (The fact that our measures are only minimally related to socially desirable response tendencies further supports this claim.)

Our work has several strengths that render it particularly noteworthy. First, we used multiple modes of measurement in assessing tendencies toward exit, voice, loyalty, and neglect: self-reported tendencies, partner reports of tendencies, and relatively more behavioral measures obtained from responses to open-ended questions. The fact that we obtained similar patterns of findings across the several modes of measurement suggests that our findings should be regarded as relatively more dependable. Second, we have developed and obtained support for a model of problem solving in close relationships that is a relatively complex one, addressing the effects of individual response tendencies,

partner perceptions of one another's response tendencies, and interdependent patterns of couple responding.

One final issue concerns causal ordering: We must ask whether the couple patterns of problem solving observed herein cause level of couple distress, or whether level of distress causes the observed patterns of problem solving. Given that we are assessing the relation between an attribute variable—couple distress/non-distress—and various problem-solving behaviors, we cannot be certain of direction of causality. The only way to determine which of these causal orderings is the more valid account is to carry out a longitudinal investigation of dating or married couples: to follow newly formed couples, charting the development of their relationships as well as changes in patterns of individual and couple problem solving (cf. Markman, 1981). We are at present carrying out such an investigation.

Our work contributes to the understanding of couple problem solving by demonstrating first, that whether a couple functions effectively appears to have much to do with tendencies to (or not to) react to relationship problems in a destructive fashion. It is the bad things that individual partners do rather than the good things that they do not do that distinguishes between well- and poorly functioning couples. Second, partners' perceptions of one another's problem-solving styles are also predictive of level of couple health; relationships benefit from individual perceptions that their partners engage in high levels of voice and loyalty and low levels of exit and neglect. Third, interdependent patterns of response are effectively predictive of nondistress. In more distressed relationships, when partners engage in exit or neglect, individuals tend to respond with high levels of destructive behaviors and low levels of constructive behaviors in return. Thus it is the way in which partners react during difficult times rather than the way they behave when things are going well that determines whether a relationship "works." Lastly, we observed some gender differences in problem-solving style: In comparison with men, women are more likely to evince voice and loyalty and may be somewhat less likely to engage in neglectful responses. These findings contribute to the understanding of behavior in close relationships by identifying several variables that appear to be critical in determining whether a relationship functions successfully. These results extend the domain to which one can apply the exit-voice-loyalty-neglect typology of responses to periodic decline in close relationships, and demonstrate that this typology is a useful means of portraying what "works" in close relationships.

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