

Exit, Voice, Loyalty, and Neglect: Responses to Dissatisfaction in Romantic Involvements

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A typology of characteristic responses to dissatisfaction in romantic relationships is discussed, and hypotheses concerning the determinants of each category of response are outlined. It is argued that the four primary reactions to relationship decline are exit, voice, loyalty, and neglect. Three investment model variables (Rusbult, 1980a) should predict the conditions under which each response is most likely to be enacted: (a) the degree of satisfaction with the relationship prior to the emergence of problems, (b) the magnitude of the individual's investment of resources in the relationship, and (c) the quality of the best available alternative to the relationship. Four studies provided generally consistent support for the hypotheses. As predicted, to the extent that prior satisfaction was high, voice and loyalty were more probable, whereas exit and neglect were less probable. Similarly, increases in investment size encouraged voice and loyalty, whereas lower levels of investment appeared to inspire exit or neglect responses. More attractive alternatives promoted exit while hampering loyalist behavior. These results are in agreement with investment model predictions. However, there seemed to be no (or, at best, a weak) relation between alternative quality and voice or neglect reactions to dissatisfaction.

How do individuals respond when they become dissatisfied with their romantic involvements? Under what circumstances are they likely to actively discuss problems, and under what circumstances are they likely simply to end their relationships? When are people likely to react with quiet loyalty, and when do they respond with benign neglect? Social scientists have proffered numerous theories designed to describe the development of romantic relationships (Clore & Byrne, 1974; Levinger & Snoek, 1972; Murstein, 1976; Saegert, Swap, & Zajonc, 1973), but insufficient attention has been given to the phenomenon of relationship decline.

Some researchers have explored the impact of a variety of concrete factors (e.g., income, education, age) on specific responses

to dissatisfaction, such as divorce and break-ups (Hill, Rubin, & Peplau, 1976; Levinger & Moles, 1979), communication style and content (Fineberg & Lowman, 1975; Wills, Weiss, & Patterson, 1974), extrareationship sexual involvements (Glass & Wright, 1977; Jaffe & Kanter, 1976), and the expression of negative affect or hostility (Billings, 1979; Gottman, Notarius, Markman, Bank, & Yoppi, 1976). Researchers working within this tradition have identified a wide range of potential responses to dissatisfaction and have explored the impact of numerous basic factors on these behaviors. However, few of these authors have developed systematic taxonomies of this domain of behaviors, nor have they constructed abstract models of the conditions that promote one response over alternative reactions.

Other psychologists have proposed theories of the development and deterioration of relationships. For example, in their discussion of the "depenetration process," Altman and Taylor (1973) explore the process of conflict management and suggest that depenetration involves "a cycling between excessive interaction and withdrawal" (p. 174), which leads to more constricted exchange.

This research was supported by a grant to the first author from the University of Kentucky Research Foundation. The authors wish to express their sincere gratitude to Anne Andrews, Susan Banta, Deborah Dempsey, Randall James, Ricky Jones, Marsha Webster, and Lynn West for their help in conducting the studies and to Michael Hubbard and David Lowery for useful comments on an earlier draft of this article.

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Levinger (1979) describes relationship growth and dissolution in terms of attractions (positive minus negative) and barriers (commitments, obligations, termination costs) inherent in a given romantic involvement. Rusbult (1980a) also proposes that the individual's level of commitment to maintain a relationship is in large part a function of three simple factors: declining satisfaction, increases in alternative quality, or "divestiture," which lead to declining commitment and relationship dissolution. Each of these approaches provides an interesting theoretical account of growth and decline processes, but all focus primarily on individuals' stay/leave decisions to the exclusion of alternative reactions to dissatisfaction.

Thus, one body of literature provides a rich description of the range of available responses to decline, and a second tradition presents theoretical models of the process of deterioration. The present article attempts to integrate these two approaches. Its goals are to (a) outline a simple typology of reactions to declining satisfaction and (b) propose a theory that delineates a set of abstract predictors of these responses.

The present model draws on knowledge accumulated in research and theory, reported above, and emerges directly from several additional sources: (a) Hirschman's (1970, 1974) theory of responses to decline in economic/political organizations, (b) Rusbult and Zembrodt's (in press) typology of responses to declining satisfaction in romantic associations, and (c) Rusbult's (1980a) investment model of satisfaction and commitment in exchange relationships.

In his discussion of reactions to decline in firms, organizations, and states, Hirschman (1970) attempted to outline a simple typology of responses to dissatisfaction. He proposed that three characteristic responses to deteriorating satisfaction exist: (a) exit—ending the relationship, (b) voice—actively and constructively expressing one's dissatisfaction, with the intent of improving conditions, and (c) loyalty—passively but optimistically waiting for conditions to improve.

Rusbult and Zembrodt (in press) performed a multidimensional-scaling study of responses to declining satisfaction in ongoing, adult romantic involvements and found

that these three categories characterize behaviors in romantic relationships. They also identified a fourth logical response to dissatisfaction, neglect: passively allowing a relationship to atrophy. These four categories appeared to provide a fairly comprehensive, yet simple, description of the domain of reactions to deteriorating satisfaction. The following are examples of behaviors representative of each category of response:

- Exit—formally separating, moving out of a joint residence, deciding to "just be friends," getting a divorce.
- Voice—discussing problems, compromising, seeking help from a therapist or clergyman, suggesting solutions to problems, asking the partner what is bothering him or her, trying to change oneself or change the partner.
- Loyalty—waiting and hoping that things will improve, "giving things some time," praying for improvement.
- Neglect—ignoring the partner or spending less time together, refusing to discuss problems, treating the partner badly emotionally or physically, criticizing the partner for things unrelated to the real problem, "just letting things fall apart," (perhaps) developing extra-relationship sexual involvements.

Theoretically, these responses differ from one another along two dimensions. The first dimension is constructiveness/destructiveness. Whereas voice and loyalty are constructive responses that are generally intended to maintain and/or revive the relationship, exit and neglect tend to be relatively destructive. The second dimension is activity/passivity. Exit and voice are active behaviors (i.e., the individual is doing something about the relationship), whereas loyalty and neglect are more passive responses.¹ The current meaning of the term *passive* may differ somewhat from common usage. Here, *passive* refers to the impact of the behavior on the problem at hand and may not necessarily be descriptive of the behavior itself. For example, a neglectful response such as destructive criticism may be overtly active, but it is passive and destructive in regard to the future of the current relationship.

Rusbult's investment model (1980a) identifies some basic variables that may predict the conditions under which each of these four responses should occur. The model is based on interdependence theory (Kelley & Thi-

¹ In the most extreme cases, of course, loyalty and neglect are "nonresponses," or the complete absence of activity, and are behaviorally indistinguishable.

baut, 1978; Thibaut & Kelley, 1959) and employs traditional exchange-theory concepts (c.f. Blau, 1964; Homans, 1961). That is, the model assumes that humans are motivated to maximize outcomes, points to the importance of relationship structure as a determinant of behavior in dyads, and makes use of exchange-theoretical constructs such as rewards, costs, alternatives, and investments. Thus, it is similar in many respects not only to interdependence theory but also to the work of Levinger (1979), Altman (1974), Blau (1964), and Becker (1960). In the past, the investment model has been utilized to describe the development of satisfaction and commitment in exchange relationships such as romantic associations (Rusbult, 1980a), friendships (Rusbult, 1980b), and jobs (Farrell & Rusbult, 1981). The three variables that predict degree of commitment to relationships should also determine the conditions under which exit, voice, loyalty, and neglect are likely to be enacted. These three variables are (a) the degree to which the individual was satisfied with the relationship prior to its decline, (b) the magnitude of the individual's investment of resources in the relationship, and (c) the quality of the individual's best alternative to the current relationship.

In general, increases in prior satisfaction should promote constructive rather than destructive responses to dissatisfaction. Given high prior satisfaction, the individual is likely to believe that it is desirable to restore the relationship to its previous state and that constructive responses are more likely than destructive ones to produce "payoffs." Thus, greater prior satisfaction should induce voice and loyalty while discouraging exit and neglect. The extant research provides indirect support for these assertions. It has been demonstrated that greater marital satisfaction, happiness, and adjustment (each of which implies greater prior satisfaction) are associated with voicelike behaviors such as superior communication (Beir & Sternberg, 1977; Murphy & Mendelson, 1973), greater self-disclosure (Critelli & Dupre, 1978), more expressions of love and affection (Fineberg & Lowman, 1975), more frequent exchanges of pleasurable behaviors (Wills et al., 1974), and greater perceptual accuracy between

partners (Sporakowski & Hughston, 1978). Decreases in satisfaction seem to be associated with neglect responses such as the expression of negative affect, hostility, and belligerent complaints (Billings, 1979; Gottman, Markman, & Notarius, 1978; Hawkins, 1968); negative attributions about partners' communications (Gottman et al., 1976); the enjoyment of fewer shared recreational activities (Birchler, Weiss, & Vincent, 1975); and the greater likelihood of extramarital coitus (Bell, Turner, & Rosen, 1975; Glass & Wright, 1977). It also appears that greater homogamy, higher socioeconomic status (SES), higher esteem for partner, and increased satisfaction tend to produce more stable, durable relationships (i.e., loyalty), whereas greater marital discord, unequal involvement, low homogamy, and husbands' low income and employment stability are predictive of divorce and separation (i.e., exit; Cherlin, 1979; Cutright, 1971; Hill et al., 1976; Todres, 1978). Collectively, these results provide support for the hypothesis that greater prior satisfaction promotes voice and loyalty and inhibits exit and neglect.

Increases in investment size should also encourage constructive behaviors while discouraging destructive responses. "Investments" refers to the resources the individual has put directly into the relationship that are then intrinsic to that involvement (e.g., self-disclosing, spending time with the partner, investing emotion) or resources that are extrinsic but have become indirectly connected to the association (e.g., shared material possessions, shared recreational activities, mutual friends). Individuals who have invested highly in their relationships have much to lose by abandoning them and should therefore be more likely to enact constructive responses intended to maintain their relationships. Unfortunately, few researchers have explored the phenomenon of investment. However, relationships of greater duration (i.e., greater investment size) have been shown to exhibit higher levels of communication (i.e., voice; Krain, 1975), and younger persons, who have perhaps invested less in their relationships, are more likely to separate and divorce (i.e., exit; Bloom, Hodges, Caldwell, Systra, & Cedrone, 1977). Additionally, Rusbult (1980a) found that individuals who had

invested more heavily in their relationships were more likely to report commitment to their partners and relationships (i.e., exhibit loyalty) and less likely to report intentions to end their involvements (i.e., exit). Evidence from research on nonromantic relationships also supports these hypotheses. Experiments on the entrapment phenomenon consistently demonstrate that persons who have numerous or sizable resources attached to a line of action are very likely to persist in that behavior (i.e., remain loyal; Rubin & Brockner, 1975; Staw, 1976; Staw & Fox, 1977; Teger, 1980). The literature on effort justification also suggests that individuals who have exerted greater effort for an activity/person are likely to report greater attraction and commitment to that activity (i.e., exhibit loyalty; Aronson & Mills, 1959; Gerard & Mathewson, 1966; Wicklund, Cooper, & Linder, 1967).

Alternative quality should determine whether the individual's response to dissatisfaction will be active or passive. Good alternatives (an alternative relationship or solitude) both provide the individual with the motivation to do something (be active, voice, or exit; "shape up or ship out") and give him or her a source of power for effecting changes in the relationship—the threat posed by an attractive alternative can serve as a source of power. In the absence of a good alternative, the more probable reaction is to passively wait for the relationship to improve (i.e., remain loyal) or passively allow it to die (i.e., neglect it). Research evidence suggests that good alternatives—in the form of an extra-relationship sexual partner (Glass & Wright, 1977; Hunt, 1969; Jaffe & Kanter, 1976), the wife's greater actual or potential earnings (Cherlin, 1979; Ross & Sawhill, 1975), or greater physical attractiveness relative to partner (White, 1980)—are positively associated with breakups or divorce. Rusbult (1980a) also found that better alternatives encouraged separation (i.e., exit) and discouraged commitment to maintain relationships (i.e., loyalty).

In what way can these hypotheses be tested? Because effecting experimental manipulations of critical features in romantic involvements was judged from the outset to be unethical and/or nearly impossible, alter-

native methodologies were by necessity explored. Ideally, a combination of longitudinal studies and careful observation of married couples' problem-solving behaviors should be undertaken (such research is presently being planned). The present article reports four studies designed as a preliminary test of these hypotheses. Two studies employ role-playing methodologies and two explore responses to dissatisfaction in cross-sectional surveys of real, adult romantic involvements. Both role-playing experiments (Cooper, 1976; Darroch & Steiner, 1970; Freedman, 1972) and survey studies (Campbell & Stanley, 1963; Kidder, 1981) have methodological weaknesses: Role-playing methods possess low realism, and survey approaches are incapable of producing sound information concerning cause-effect relations. But the strengths of one method correspond to the weaknesses of the other. The role-playing studies are highly controlled and clearly demonstrate causal relations, whereas the surveys possess greater real-world validity. Thus, through converging operations, these studies may provide a preliminary test of the current model.

Study 1

Study 1 was designed to establish the causal impact on exit, voice, loyalty, and neglect of changes in investment model factors. Degree of prior satisfaction, investment size, and alternative quality were orthogonally manipulated in a role-playing essay that described a once-satisfying relationship on the decline. Subjects were asked to place themselves in the position of the essay protagonist (the dissatisfied individual) and complete a questionnaire concerning their reactions to and probable behavior in that situation.

Method

Subjects. Subjects were 128 undergraduates from introductory psychology classes at the University of Kentucky. Each of 16 subjects recruited for every experimental session was randomly assigned to one of eight experimental conditions. There were equal numbers of males and females within each condition.

Procedure. The experimenter informed subjects that they were to read an essay describing a fictional situation and asked that they attempt to place themselves in the position of the major character. Essays read by male and

female subjects were identical except for changes in the sex of the major character, current partner, and alternative partner. In females' essays, the protagonist (Sarah) was described as a 21-year-old college student who enjoyed reasonable success socially and academically. Sarah had dated her current partner, Robert, for 3 months and had disclosed some of her personal feelings to him. However, this relationship had recently become less satisfying because Robert had started drinking heavily at parties and had said rude and abusive things to Sarah and her friends. Additionally, Sarah had recently met a man named John who was interested in dating her. The essay ended with the following statement: "What are you going to do about your relationship with Robert? Think about this situation for a few minutes, reading the essay a second time if necessary. Then complete the attached questionnaire." At the end of the session subjects were debriefed and thanked for their participation.

Independent variables. Prior satisfaction was manipulated through variations in the description of the protagonist's feelings for his or her partner before the partner developed a drinking problem. In the low-prior-satisfaction condition the current partner was described as marginally attractive on a variety of dimensions, and the protagonist was said to be only "moderately attracted to Robert . . . you think that you are not really in love with him, and aren't really as satisfied with the relationship as you have been with past ones." In contrast, in the high-prior-satisfaction condition the current partner was said to possess numerous attractive qualities, and the involvement was described as "relatively rewarding . . . you are fairly strongly attracted to Robert . . . you are coming to love him." Investment size was varied through changes in the description of the amount and type of the protagonist's self-disclosures to the current partner. In the high-investment-size condition the protagonist was said to have disclosed about "the most private, secret aspects" of her life, whereas in the low-investment-size condition the protagonist had disclosed little. Alternative quality was manipulated through changes in the description of the alternative person (John/Lisa) who was interested in dating the protagonist. In the high-alternative-quality condition John was described as an extremely attractive person who engaged in many activities Sarah found to be enjoyable. In the low-alternative-quality condition the alternative was described as only moderately appealing.

Dependent variables. All subjects wrote responses to the following open-ended question: "Please describe the way in which you are likely to respond to your current dissatisfaction with Robert." One blank, lined page was provided for subjects' responses. Two trained coders, naive to the experimental condition that elicited each response, scored each essay for degree of exit, voice, loyalty, and neglect (1 = not at all, 5 = definitely; the respective interrater reliability coefficients were .82, .85, .75, and .68). Subjects then completed 17 Likert-type manipulation checks and dependent measures. End points on the seven-point scales were "not at all/extremely," "nothing/a great deal," or "not at all/definitely." The prior-satisfaction manipulation checks asked how satisfying the relationship was, how attracted to the relationship the subject was, and the extent to which the subject liked/loved the partner before the drinking prob-

lem emerged. The investment-size manipulation checks required that subjects report the degree to which they disclosed their private feelings to the partner, the partner was aware of the subject's "private self," and the subject had invested emotionally in the relationship. For the alternative-quality variable, the manipulation checks asked how satisfying the subject thought a relationship with the alternative would be, how attracted to that relationship the subject was, and the extent to which the subject liked/loved the alternative person. Two measures of each response to dissatisfaction were obtained. For exit, the measures were "I will end the relationship with Robert" and "I am motivated to end my current relationship." The voice measures were "I will try to discuss the problem with Robert" and "I will openly discuss the problems with our relationship." The two measures of loyalty were "I will remain quietly loyal to my relationship with Robert" and "I don't plan to do anything but expect that things will improve." For neglect, the two measures were "I will passively allow the relationship with Robert to deteriorate" and "I don't plan to do anything, and expect that things will become worse."

Results and Discussion

Reliability of measures. Measures within each set of items were statistically related to one another: A series of reliability analyses revealed significant alphas for the prior satisfaction (.89), investment size (.95), and alternative quality (.86) manipulation checks and for the Likert and coded-essay measures of exit (.80), voice (.82), loyalty (.66), and neglect (.65). Because all reliability coefficients exceeded lowest acceptable levels (Nunnally, 1967), a single averaged measure was created for each set.

Manipulation checks. Three-factor analyses of variance (ANOVAs) were performed on each set of manipulation checks. Compared to subjects in the low-prior-satisfaction condition, subjects in the high-prior-satisfaction condition reported greater satisfaction with the partner prior to the development of his/her drinking problem (low $M = 4.99$, high $M = 6.04$), $F(1, 120) = 57.69$, $p < .001$. Subjects in the high-investment condition stated that they had invested more heavily than their low-investment counterparts (low $M = 1.82$, high $M = 6.13$), $F(1, 120) = 615.15$, $p < .001$. Subjects in the high-alternative-quality condition reported greater attraction to their alternatives than did those in the low-alternative-quality condition (low $M = 4.54$, high $M = 5.42$), $F(1, 120) = 39.38$, $p < .001$. No other main effects or interactions were significant. Thus, all three inde-

pendent-variable manipulations appear to have been successful.

Responses to dissatisfaction. A three-factor multivariate analysis of variance (MANOVA) was performed on the four response-to-dissatisfaction measures.² The results of this analysis are displayed in Table 1. As predicted, high prior satisfaction produced a greater tendency toward voice and loyalty and a lesser tendency toward exit and neglect than did low prior satisfaction, $F(4, 117) = 11.19, p < .001$. Compared to subjects in the low-investment-size condition, those in the high-investment-size condition were more likely to enact voice and loyalty than exit and neglect, $F(4, 117) = 3.01, p < .02$, although the impact on neglect was not statistically significant. The multivariate effect of alternative quality on the four responses was significant, $F(4, 117) = 3.59, p < .009$, but the only significant univariate effects were for the exit and neglect measures. Additional analyses revealed that sex of subject produced no significant main effects or interactions, and there were no other statistically significant effects. Thus, hypotheses concerning the impact of prior satisfaction and investment size were generally supported, although the impact of investment size on neglect was not statistically significant. Alternative quality significantly influenced exit and neglect but not voice or loyalty.

Study 2

The second study was designed to determine whether the results of Study 1 hold in real, ongoing romantic involvements. A cross-sectional survey of college-age subjects' romantic involvements was performed to obtain measures of each model parameter. Multiple regression and related techniques were employed to test predictions concerning the determinants of each response to dissatisfaction.

Method

Subjects. Subjects were 85 University of Kentucky undergraduates who completed the questionnaire for course credit. Fifteen to 20 subjects attended each experimental session.

Procedure. The experimenter explained that subjects were to complete a questionnaire designed to explore the ways in which people react when they become dis-

Table 1
Mean Exit, Voice, Loyalty, and Neglect for Each Experimental Manipulation: Study 1

Variable	Level of independent variable	
	High	Low
Prior satisfaction		
Exit	3.15	4.26**
Voice	4.73	4.04**
Loyalty	2.64	2.03**
Neglect	2.34	3.08**
Investment size		
Exit	3.45	3.98*
Voice	4.72	4.05**
Loyalty	2.54	1.94*
Neglect	2.18	2.49
Alternative quality		
Exit	3.85	3.54*
Voice	4.53	4.24
Loyalty	2.28	2.45
Neglect	2.51	2.71*

Note. Higher numbers indicate a greater propensity to enact that response to dissatisfaction. The possible range of each measure (after appropriate transformations) was 1 to 6 (two scales ranged from 1 to 7, two from 1 to 5). Each mean is the average of four measures of that response.

* $p < .05$. ** $p < .001$.

satisfied with their romantic involvements. She described the range of relationships subjects were allowed to describe (any duration or degree of seriousness) and stated that the dissatisfaction described in the questionnaire could concern any problem from the most trivial annoyance to the most severe incompatibility. After finishing the questionnaire, which required approximately 30 minutes to complete, subjects were debriefed.

Questionnaire. Subjects wrote one-page essays in response to the following: "Please think of a time when you became dissatisfied with your romantic relationship. Describe that situation and your feelings, and especially your response to the situation." Two trained coders scored each essay using the same categories employed in Study 1 (extent of each response on five-point scales; the interrater reliability coefficients were .90 for exit, .79 for voice, .54 for loyalty, and .74 for neglect). In addition, a set of seven-point Likert-type scales was constructed to measure each parameter of the investment model. For each parameter, the variable was briefly defined, a set of items representing concrete examples of the vari-

² Separate analyses of the Likert-type measures and the coded-essay measures were initially performed, and these separate analyses revealed nearly identical patterns of results. Therefore, a single averaged measure of each response to dissatisfaction was used in the analyses.

Table 2
*Correlations of Investment Model Variables
 With Exit, Voice, Loyalty, and Neglect: Study 2*

Variable	Exit	Voice	Loyalty	Neglect
Prior satisfaction	-.39**	.30*	.37**	-.39**
Investment size	-.29*	.39**	.40**	-.31*
Alternative quality	.35**	-.06	-.25*	.14

* $p < .05$. ** $p < .001$.

able was provided (e.g., for investment size, "How much time do you spend together"), and several abstract measures of the variable were obtained. Unless otherwise indicated, end anchors on the scales were "not at all/extremely" or "nothing/a great deal." The abstract measures of prior satisfaction were "Before you became unhappy with your relationship, how satisfied with it were you," "How attracted to your partner were you," "How positive were your feelings about it," and "How much did you care about your partner." Alternative quality was measured by the following abstract measures: "How satisfying did you think your alternatives (another relationship or solitude) would be," "How did your best alternative compare to your ongoing relationship" (1 = alternative was much worse, 7 = alternative was much better), and "How did your best alternative compare to the lifestyle you ideally desire" (1 = very far from ideal, 7 = very close to ideal). Three items served as abstract measures of investment size: "All things considered, to what extent were there important objects, persons, events, or activities associated with the relationship that you would have lost (in some sense) by ending it" (1 = none, 7 = a great many), "What was the size of your investment in your relationship" (1 = invested nothing, 7 = invested a great deal), and "What was the size of your investment in your relationship compared to what most people invest in their relationship" (1 = much less than others, 7 = much more than others). The measures of exit, voice, loyalty, and neglect were identical to those used in Study 1 (two measures of each response), except that they were phrased in the past tense in this experiment (i.e., "What did you do?" rather than "What will you do?").

Results and Discussion

Reliability of measures. Reliability analyses revealed significant alphas for the prior satisfaction (.89), alternative quality (.69), and investment size measures (.90) and for the Likert-type and coded-essay measures of exit (.86), voice (.80), loyalty (.65), and neglect (.74). Therefore, a single measure of each variable was formed by averaging each subject's scores on the measures that composed every set.

Responses to dissatisfaction. Multiple correlations between the four response-to-dissatisfaction measures and each investment model predictor were computed.³ Exit, voice, loyalty, and neglect were significantly correlated with prior satisfaction ($R = .50$), investment size ($R = .51$), and alternative quality ($R = .38$). Relevant zero-order correlations are presented in Table 2. Consistent with predictions, both prior satisfaction and investment size were positively correlated with voice and loyalty and negatively correlated with exit and neglect. However, although alternative quality encouraged exit and discouraged loyalty (as predicted), the correlations with voice and neglect were not statistically significant.

Study 3

Study 3 was designed to extend the generalizability of Study 1 by replicating that study while operationalizing investment model variables in different ways. Also, new items concerning exit, voice, loyalty, and neglect were created in an attempt to improve measurement. Finally, we intended to provide yet another opportunity to explore the impact of alternative quality and to determine if this factor continued to produce only weak effects on responses to dissatisfaction.

Method

Subjects. One hundred twelve University of Kentucky undergraduates participated in partial fulfillment of the requirements for an upper division psychology course. Each of 30 to 50 subjects recruited for every experimental session was randomly assigned to one of eight experimental conditions. There were equal numbers of males and females in each condition.

Procedure. The procedure was the same as in Study 1. Subjects read an essay describing a fictional situation, placed themselves in the position of the major character, and completed a questionnaire as they would if they were the essay protagonist. The protagonist was described as a reasonably successful individual involved in a deteriorating romantic relationship. The source of the dissatisfaction was the same as in Study 1—the partner's drinking problem.

Independent variables. Again, prior satisfaction was manipulated through variations in the description of the

³ Preliminary analyses revealed similar patterns of results for the Likert-type and the coded-essay measures, so an averaged measure of each response was used.

protagonist's relationship before the partner developed a drinking problem. However, the specifics of the description differed from those previously employed. In the low-prior-satisfaction condition, the current partner was described as "okay," and the protagonist was said to be "attracted to Robert, but you aren't as satisfied with the relationship as you would like to be. All things considered, you would call it an 'okay' relationship." In contrast, in the high-prior-satisfaction condition, the current partner was described as the kind of partner that Sarah had always dreamed about: All things considered, Sarah felt "that Robert was the ideal match," and she was "very strongly attracted to him." In Study 1, investment size was varied through changes in the amount and type of self-disclosures the protagonist had made to her partner; the invested resource was put directly into the relationship, according to the essay protagonist's own choice. In the present study, the invested resource was extrinsic; the resource was initially extraneous but later became connected to the relationship and would have been lost if the relationship had ended. In the high-investment-size condition, the two were tennis doubles partners who had won numerous matches together. Because their coach was convinced that they could "go far" as doubles partners, they had signed up for several tournaments in the spring and summer. Thus, the protagonist's future in tennis, which was said to be important to her, became connected to her future with Robert. In the low-investment-size condition, the two were said to play occasional doubles matches with friends, but both still preferred to play singles tennis in tournaments. Thus, although she enjoyed playing tennis with Robert, Sarah's future in tennis was in no way connected to her future with Robert. In Study 1, alternative quality was manipulated through changes in the attractiveness of a specific alternative date. In the present experiment, alternatives were varied through changes in the protagonist's evaluation of the general quality of the field of alternatives. In the high-alternative-quality condition, the protagonist felt that "there were a number of attractive, available men at the University . . . the University is a wonderful place to meet all sorts of interesting, fun men . . . 'there are a lot of fish in the sea.'" In the low-alternative-quality condition, the protagonist believed that her "standards were quite high—the available men at the University were apparently attractive to others, but not to [her] . . . 'a good man is hard to find.'"

Dependent variables. Two types of measures were obtained in the experiment. First, all subjects completed a questionnaire consisting of 17 nine-point Likert-type scales. This questionnaire was similar to that employed in Study 1 and contained manipulation checks on the three independent variables and measures of exit, voice, loyalty, and neglect. Unless otherwise noted, end points on the scales were "not at all/extremely" or "nothing/a great deal." The prior-satisfaction manipulation checks asked subjects to report degree of attraction to the partner, satisfaction with the relationship, and liking/loving for the partner before problems emerged in the relationship. The manipulation checks on the investment size variable concerned the extent to which the protagonist's career was "connected" to his or her relationship, his or her enjoyment of tennis would be affected by a change in the relationship, and it was important to con-

tinue playing tennis with the partner. The alternative-quality manipulation checks assessed degree of attraction to other persons at the University, anticipated satisfaction derived from dating these persons, and the extent to which available others compared favorably to the ideal. The exit, voice, loyalty, and neglect measures in this portion of the questionnaire were identical to those employed in Study 1 (two measures of each response). The second set of measures was an additional questionnaire designed specifically to obtain better measures of exit, voice, loyalty, and neglect. This questionnaire contained 20 five-point Likert-type scales: five items for each response to dissatisfaction. The endpoints for each item were 1 = I would definitely not do this and 5 = I would definitely do this. The exit measures were "I would end the relationship," "I would tell my partner to leave," "I would try to figure out ways to get out of it," "I would drop him/her like a hot potato," and "We would go our separate ways." The voice measures were "I would talk to my partner about what was bothering me," "I would suggest things that I thought would help us," "I would ask my partner what was bothering him/her," "I would ask my partner what I was doing wrong," and "I would try to fix things up." The loyalty measures were "When the problems emerged, I would wait, hoping things would get better," "I would hope that if I just hung in there things would get better," "I would wait patiently," "I would never consider ending the relationship—I would wait for things to improve some," and "I would wait to see what would happen." The neglect measures were "I guess I would just sort of let things fall apart," "I would get angry and wouldn't talk at all," "I would watch t.v., and we probably wouldn't talk much," "I would start treating my partner badly," and "I would allow the relationship to 'die a slow death.'" These items were randomly ordered, and a single random order was employed across all subjects.⁴

Results and Discussion

Reliability of measures. Reliability analyses revealed significant alphas for the manipulation checks designed to measure prior satisfaction (.95), investment size (.92), and alternative quality (.95) and for both sets of measures of exit (.79), voice (.80), loyalty (.76), and neglect (.66). Therefore, a single averaged measure was computed for each set of items.

Manipulation checks. The manipulation checks were subjected to a three-factor ANOVA. Compared to low-prior-satisfaction-condition subjects, high-prior-satisfaction subjects reported greater attraction, love, and satisfaction prior to the relationship's decline

⁴ Because results for open-ended essay responses and structured questionnaire items were equivalent in Studies 1 and 2, no open-ended essay responses were obtained in this study.

(low $M = 5.25$, high $M = 7.97$), $F(1, 104) = 383.54$, $p < .001$. High-investment-size subjects felt more "connected" to their partners than did their low-investment-size counterparts (low $M = 2.21$, high $M = 7.01$), $F(1, 104) = 415.64$, $p < .001$. Subjects in the high-alternative-quality condition perceived that the field of alternatives was generally more attractive and appealing than did those in the low-alternative-quality condition (low $M = 2.68$, high $M = 6.94$, $F(1, 104) = 416.39$, $p < .001$). No other main effects or interactions were significant. Thus, the experimental manipulations appear to have been successful.

Responses to dissatisfaction. A three-factor MANOVA was performed on the exit, voice, loyalty, and neglect measures.⁵ A summary of the results of this analysis is presented in Table 3. The multivariate effect on responses to dissatisfaction was significant for the prior satisfaction, $F(4, 101) = 10.64$, $p < .001$, and investment size factors, $F(4,$

101) = 3.10, $p < .02$, but not for the alternative quality variable, $F(4, 101) = .20$, $p < .94$, *ns*. As predicted, prior satisfaction significantly promoted voice and loyalty and discouraged exit and neglect. Greater investment in a relationship encouraged loyalty and inhibited exit and neglect but did not significantly affect voice behaviors. These results are in basic agreement with the hypotheses and with the results of Studies 1 and 2. However, although the alternative quality manipulation appeared to have created the intended conditions, this variable did not significantly affect any of the four responses to dissatisfaction. Additional analyses revealed no significant main effects or interactions involving sex of subject, and there were no significant interactions in the three-factor analysis above.

Study 4

Study 4, a cross-sectional questionnaire, was identical to Study 2 except for two variations. First, questionnaire items were rewritten in an attempt to obtain better measures of each investment model parameter. Particular care was taken on the alternative quality measures, which yielded a lower reliability coefficient in Study 2 than did other clusters of measures. Second, the new response-to-dissatisfaction scale (from Study 3) was added to the existing questionnaire in order to measure exit, voice, loyalty, and neglect better.

Method

Subjects. Subjects were 77 undergraduates from an introductory sociology course. The questionnaire was completed during a regular lecture session, so all subjects performed the task simultaneously.

Procedure. The experimenter explained the purpose and nature of the questionnaire, as in Study 2. Subjects were asked to describe a relatively dissatisfying experience (of trivial or major importance) in a romantic relationship of any duration or degree of involvement. The questionnaire required approximately 40 minutes to complete. After all subjects had finished, students were debriefed and thanked for their cooperation.

Questionnaire. As in Study 3, the questionnaire contained two types of measures: regular seven-point Likert-

Table 3
Mean Exit, Voice, Loyalty, and Neglect for
Each Experimental Manipulation: Study 3

Variable	Level of independent variable	
	High	Low
Prior satisfaction		
Exit	3.21	4.09**
Voice	5.81	4.98**
Loyalty	3.89	3.23*
Neglect	2.54	3.07**
Investment size		
Exit	3.51	3.90*
Voice	5.41	5.38
Loyalty	3.70	3.32*
Neglect	2.65	2.96*
Alternative quality		
Exit	3.69	3.61
Voice	5.44	5.35
Loyalty	3.57	3.45
Neglect	2.84	2.78

Note. Higher numbers indicate a greater propensity to enact that response. The possible range of each measure (after appropriate transformations) was approximately 1 to 7 (two scales ranged from 1 to 9, five from 1 to 5). Each mean is the average of seven measures of that response.

* $p < .05$. ** $p < .001$.

⁵ Preliminary analyses revealed identical patterns of findings for the two types of measures of response to dissatisfaction, so a single averaged measure of each response was used in the analyses.

type items, designed to measure investment model variables (both concrete and abstract) and responses to dissatisfaction (these were modified from those used in Study 2), and the response-to-dissatisfaction scale developed for Study 3. Unless otherwise indicated, end anchors were "not at all/extremely," "none/many," or "nothing/a great deal." Both concrete and abstract measures of prior satisfaction and investment size were identical to those employed in Study 2. Several new concrete measures of alternative quality were added, and previous measures were revised in an attempt to make their meaning clearer (e.g., the second measure was changed to "Which was better, your relationship or your alternatives?" 1 = alternatives were much worse, 7 = alternatives were much better). The exit, voice, loyalty, and neglect measures were the same as those employed in the previous studies. The seven-point questionnaire items were identical to those in Studies 1, 2, and 3 (two measures of each response). The response-to-dissatisfaction scale, a second means of measuring each reaction, was identical to that used in Study 3 except that items were phrased in the past tense.⁶

Results and Discussion

Reliability of measures. Reliability analyses revealed significant alphas for the sets of items designed to measure prior satisfaction (.89), investment size (.86), alternative quality (.79), exit (.82), voice (.88), loyalty (.85), and neglect (.72).⁷ Therefore, the measures employed in the remaining analyses were averaged scores for items within each cluster.

Responses to dissatisfaction. Each investment model variable was regressed onto the exit, voice, loyalty, and neglect measures. The resulting multiple correlations were significant for prior satisfaction ($R = .68$), investment size ($R = .61$), and alternative quality ($R = .57$).⁸ Zero-order correlations between investment model variables and responses to dissatisfaction are presented in Table 4. Consistent with the experimental hypotheses, both prior satisfaction and investment size were positively correlated with voice and loyalty and negatively correlated with exit and neglect. Also as predicted, alternative quality was positively related to exit and negatively related to loyalty. However, alternative quality was not significantly correlated with voice or neglect.

General Discussion

The results of the four studies presented in this article provide fairly consistent evidence concerning the impact of investment

Table 4
Correlations of Investment Model Variables With Exit, Voice, Loyalty, and Neglect: Study 4

Variable	Exit	Voice	Loyalty	Neglect
Prior satisfaction	-.48**	.56**	.49**	-.45**
Investment size	-.27*	.59**	.38**	-.38**
Alternative quality	.54**	-.14	-.48**	.19

* $p < .05$. ** $p < .001$.

model variables on exit, voice, loyalty, and neglect. Across all four studies, variations in prior satisfaction produced the hypothesized effects: Subjects who had been more satisfied with their relationships before problems emerged were more likely to respond to their dissatisfaction with voice and loyalty and were less likely to respond with exit or neglect. The investment size variable produced a similar pattern of results: Among highly invested persons, voice (three of four studies) and loyalty (all four studies) were more probable responses, whereas exit (all four studies) and neglect (three of four studies) were less likely. Thus, individuals who were initially relatively happy with or highly invested in their relationships were more likely to enact fairly constructive responses when they became dissatisfied. Constructive reactions included behaviors such as discussing problems, compromising, adopting an active problem-solving orientation, or simply waiting patiently for conditions to improve. Lower levels of satisfaction or investment were promotive of relatively destructive behaviors such as ignoring the partner, quietly

⁶ In Studies 1 and 2, open-ended essay responses and structured questionnaire items yielded equivalent findings, so open-ended responses were not obtained in this study.

⁷ For all four studies, the results of statistical analyses on the investment model and response-to-dissatisfaction measures were consistent with standard requirements for discriminant and convergent validity. Further information concerning scale characteristics is available from the first author.

⁸ Preliminary analyses revealed similar patterns of results for the two types of measures of response to dissatisfaction, so an averaged measure of each response was formed for the analyses.

allowing the relationship to decay, or ending the relationship.

Results concerning the impact of variations in the quality of the individual's alternatives were inconsistent. In three of the four studies, higher quality alternatives encouraged exit, and in two studies, good alternatives discouraged loyalty. (In Study 3, where alternatives were operationalized as generalized expectations, no significant effects on responses to dissatisfaction were obtained.) Thus, there is some evidence that better alternatives (at least, better concrete alternatives) promote exit and inhibit loyalty. However, alternative quality significantly influenced neglect behaviors in only one study and had no significant impact on voice responses. In future research it might be fruitful to examine the effects of a desirable concrete alternative as opposed to no alternative or a definitely undesirable alternative. The present research contrasted desirable and neutral concrete alternatives (Study 1) and desirable and undesirable generalized alternatives (Study 3). It may be that in the present studies, alternative quality was not manipulated (or measured, in Studies 2 and 4) as well as it could have been or that only certain sorts of alternatives strongly encourage voice (or discourage neglect). Alternatively, these findings may suggest that alternative quality is most strongly predictive of simple stay/leave decisions. This conclusion seems warranted in light of past research concerning the impact of alternatives on commitment. Rusbult (1980a) carried out two studies in which better alternatives significantly decreased commitment to maintain romantic relationships. Because exit and loyalty should be promoted by the same factors that encourage the extremes of low versus high commitment, these two sets of findings are consistent with one another: Good alternatives encourage exit and low commitment to maintain relationships, whereas poor alternatives promote loyalty and high commitment. However, this line of reasoning is clearly post hoc, and these issues should be explored further.

Although the present studies provide generally good support for the experimental predictions, these findings should be viewed as a preliminary test of the proposed model. Problems with role playing and survey data

have been previously discussed, and because of these problems, the generalizability of these results may be limited. However, significant effects were obtained using a relatively inexperienced subject population (college students) who were asked to employ introspection and/or retrospection. This (somewhat remarkable) fact suggests that the model may be fruitfully applied to the study of more long-standing involvements utilizing more sophisticated and sensitive methodologies.

The directions for future research should be clear. First, the relation between questionnaire reports of response to dissatisfaction and actual couple behaviors should be explored. For example, do voice responses on a questionnaire "translate" into superior problem-solving skills among real couples? Do neglect responses translate into spouse abuse/neglect or extrarelationship affairs? A related issue concerns the generalizability of the current findings to more long-standing involvements (married couples or more extended adult relationships). Does severity of dissatisfaction influence individuals' responses? The source of dissatisfaction in both role-played studies was a relatively serious one—the partner's drinking problem. The impact in the survey studies of severity of dissatisfaction was also not explored. Future research should examine the impact of degree of dissatisfaction and should explore interactions of this factor with other variables, particularly alternative quality. Do responses to dissatisfaction differ as a function of age or relationship duration? Also, the present research was designed to explore responses to dissatisfaction from the point of view of one member of the relationship. It would be interesting to explore this phenomenon from the point of view of the dyad: What exchange processes are involved, what is the impact of one individual's response on the behavior of his or her partner, and so on. Finally, it seems critical that research be designed to explore temporal sequencing of responses to dissatisfaction. Do persons characteristically respond initially with one response (perhaps loyalty) and later cycle through other alternative behaviors (perhaps voice, followed by neglect and exit)? In this regard, Altman and Taylor's (1973) comments on the cycling of

conflict may suggest some interesting predictions.

Collectively, the four studies reported in this article provide good evidence concerning the relation between investment model factors and responses to dissatisfaction in romantic relationships. The present research deals not only with stay/leave decisions but describes a more complex, comprehensive set of possible reactions to relationship decline. The current model is capable of integrating previously unrelated research on such diverse behaviors as marital communication and conflict resolution, separation and divorce, romantic satisfaction and commitment, spouse abuse and neglect, and extra-relationship sexual involvements. This approach not only presents an abstract typology of the range of possible reactions to relationship decline but also offers a theory concerning the conditions under which each response ought to be more or less probable—the investment model. Because the investment model emerged from the exchange tradition within social psychology (Kelley & Thibaut, 1978; Thibaut & Kelley, 1959), it should be possible to relate the present approach to other exchange models of developing relationships (Altman & Taylor, 1973; Levinger, 1976; Levinger & Snoek, 1972). The investment model of the development (cf. Rusbult, 1980a) and decline (cf. Rusbult & Zembrodt, in press) of romantic involvements may thus prove to make a useful contribution to the literature on interpersonal processes.

References

- Altman, I. The communication of interpersonal attitudes: An ecological approach. In T. L. Huston (Ed.), *Foundations of interpersonal attraction*. New York: Academic Press, 1974.
- Altman, I., & Taylor, D. A. *Social penetration: The development of interpersonal relationships*. New York: Holt, Rinehart & Winston, 1973.
- Aronson, E., & Mills, J. The effect of severity of initiation on liking for a group. *Journal of Abnormal and Social Psychology*, 1959, 59, 177–181.
- Becker, H. S. Notes on the concept of commitment. *American Journal of Sociology*, 1960, 66, 32–40.
- Beir, E. G., & Sternberg, D. P. Marital communication. *Journal of Communication*, 1977, 27, 92–97.
- Bell, R. R., Turner, S., & Rosen, L. A multivariate analysis of female extramarital coitus. *Journal of Marriage and the Family*, 1975, 37, 375–384.
- Billings, A. Conflict resolution in distressed and non-distressed married couples. *Journal of Consulting and Clinical Psychology*, 1979, 47, 368–376.
- Birchler, G. R., Weiss, R. L., & Vincent, J. P. Multi-method analysis of social reinforcement exchange between maritally distressed and nondistressed spouse and stranger dyads. *Journal of Personality and Social Psychology*, 1975, 31, 349–360.
- Blau, P. M. *Exchange and power in social life*. New York: Wiley, 1964.
- Bloom, B. L., Hodges, W. J., Caldwell, R. A., Systra, L., & Cedrone, A. R. Marital separation: A community survey. *Journal of Divorce*, 1977, 1, 7–19.
- Campbell, D. T., & Stanley, J. C. *Experimental and quasi-experimental designs for research*. Chicago: Rand McNally, 1963.
- Cherlin, A. Work life and marital dissolution. In G. Levinger & O. C. Moles (Eds.), *Divorce and separation*. New York: Basic Books, 1979.
- Clore, G. L., & Byrne, D. A reinforcement-affect model of attraction. In T. L. Huston (Ed.), *Foundations of interpersonal attraction*. New York: Academic Press, 1974.
- Cooper, J. Deception and role-playing: On telling the good guys from the bad guys. *American Psychologist*, 1976, 31, 605–610.
- Critelli, J. W., & Dupre, K. M. Self-disclosure and romantic attraction. *Journal of Social Psychology*, 1978, 106, 127–128.
- Cutright, P. Income and family events: Marital stability. *Journal of Marriage and the Family*, 1971, 33, 291–306.
- Darroch, R. K., & Steiner, I. D. Role-playing: An alternative to laboratory research? *Journal of Personality*, 1970, 38, 302–311.
- Farrell, D., & Rusbult, C. E. Exchange variables as predictors of job satisfaction, job commitment, and turnover: The impact of rewards, costs, alternatives, and investments. *Organizational Behavior and Human Performance*, 1981, 27, 78–95.
- Fineberg, B. L., & Lowman, J. Affect and status dimensions of marital adjustment. *Journal of Marriage and the Family*, 1975, 37, 155–160.
- Freedman, J. L. Role-playing: Psychology by consensus. In A. G. Miller (Ed.), *The social psychology of psychological research*. New York: Free Press, 1972.
- Gerard, H. B., & Mathewson, G. The effects of severity of initiation on liking for a group: A replication. *Journal of Experimental Social Psychology*, 1966, 2, 278–287.
- Glass, S. P., & Wright, J. L. The relationship of extramarital sex, length of marriage, and sex differences on marital satisfaction and romanticism: Athanasiou's data reanalyzed. *Journal of Marriage and the Family*, 1977, 39, 691–703.
- Gottman, J. M., Markman, H., & Notarius, C. The topography of marital conflict. *Journal of Marriage and the Family*, 1978, 39, 461–477.
- Gottman, J., Notarius, C., Markman, H., Bank, S., & Yoppi, B. Behavior exchange theory and marital decision making. *Journal of Personality and Social Psychology*, 1976, 34, 14–23.
- Hawkins, J. L. Association between companionship, hostility, and marital satisfaction. *Journal of Marriage and the Family*, 1968, 30, 647–650.

- Hill, C. T., Rubin, Z., & Peplau, L. A. Breakups before marriage: The end of 103 affairs. *Journal of Social Issues*, 1976, 32, 147-168.
- Hirschman, A. O. *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*. Cambridge, Mass.: Harvard University Press, 1970.
- Hirschman, A. O. "Exit, voice, and loyalty": Further reflections and a survey of recent contributions. *Social Science Information*, 1974, 13, 7-26.
- Homans, G. C. *Social behavior: Its elementary forms*. New York: Harcourt, Brace & World, 1961.
- Hunt, M. M. *The affair*. New York: World, 1969.
- Jaffe, D. T., & Kanter, R. M. Couple strains in communal households: A four-factor model of the separation process. *Journal of Social Issues*, 1976, 32, 169-191.
- Kelley, H. H., & Thibaut, J. W. *Interpersonal relations: A theory of interdependence*. New York: Wiley, 1978.
- Kidder, L. H. *Selltiz, Wrightman, and Cook's research methods in social psychology* (4th Ed.). New York: Holt, Rinehart & Winston, 1981.
- Krain, M. Communication among premarital couples at three stages of dating. *Journal of Marriage and the Family*, 1975, 37, 609-618.
- Levinger, G. A social psychological perspective on marital dissolution. *Journal of Social Issues*, 1976, 32, 21-47.
- Levinger, G. A social exchange view on the dissolution of pair relationships. In R. L. Burgess & T. L. Huston (Eds.), *Social exchange in developing relationships*. New York: Academic Press, 1979.
- Levinger, G., & Moles, O. C. (Eds.). *Divorce and separation*. New York: Basic Books, 1979.
- Levinger, G., & Snoek, J. D. *Attraction in relationships: A new look at interpersonal attraction*. Morristown, N.J.: General Learning Press, 1972.
- Murphy, D. C., & Mendelson, L. A. Communication and adjustment in marriage: Investigating the relationships. *Family Process*, 1973, 12, 317-326.
- Murstein, B. I. *Who will marry whom?* New York: Springer, 1976.
- Nunnally, J. C. *Psychometric theory*. New York: McGraw-Hill, 1967.
- Ross, H. L., & Sawhill, I. V. *Time of transition: The growth of families headed by women*. Washington, D.C.: Urban Institute, 1975.
- Rubin, J. Z., & Brockner, J. Factors affecting entrapment in waiting situations: The Rosencrantz and Guildenstern effect. *Journal of Personality and Social Psychology*, 1975, 31, 1054-1063.
- Rusbult, C. E. Commitment and satisfaction in romantic associations: A test of the investment model. *Journal of Experimental Social Psychology*, 1980, 16, 172-186. (a)
- Rusbult, C. E. Satisfaction and commitment in friendships. *Representative Research in Social Psychology*, 1980, 11, 78-95. (b)
- Rusbult, C. E., & Zembrodt, I. M. Responses to dissatisfaction in romantic involvements: A multidimensional scaling analysis. *Journal of Experimental Social Psychology*, in press.
- Saegert, S. C., Swap, W., & Zajonc, R. B. Exposure, context, and interpersonal attraction. *Journal of Personality and Social Psychology*, 1973, 25, 234-242.
- Sporakowski, M. J., & Hughston, G. A. Prescriptions for happy marriage: Adjustments and satisfactions of couples married for 50 or more years. *Family Coordinator*, 1978, 27, 321-327.
- Staw, B. M. Knee-deep in the big muddy: A study of escalating commitment to a chosen course of action. *Organizational Behavior and Human Performance*, 1976, 16, 27-44.
- Staw, B. M., & Fox, F. V. Escalation: The determinants of commitment to a chosen course of action. *Human Relations*, 1977, 30, 431-450.
- Teger, A. I. *Too much invested to quit*. New York: Pergamon, 1980.
- Thibaut, J. W., & Kelley, H. H. *The social psychology of groups*. New York: Wiley, 1959.
- Todres, R. Runaway wives: An increasing North American phenomenon. *Family Coordinator*, 1978, 27, 17-21.
- White, G. L. Physical attractiveness and courtship progress. *Journal of Personality and Social Psychology*, 1980, 39, 660-668.
- Wicklund, R. A., Cooper, J., & Linder, D. E. Effects of expected effort on attitude change prior to exposure. *Journal of Experimental Social Psychology*, 1967, 3, 416-428.
- Wills, T. A., Weiss, R. J., & Patterson, G. R. A behavioral analysis of the determinants of marital satisfaction. *Journal of Consulting Psychology*, 1974, 42, 802-811.

Received January 14, 1982

Revision received May 3, 1982 ■