

PROBLEM-SOLVING SKILLS IN HAPPY AND DISTRESSED COUPLES: EFFECTS OF VIDEOTAPE AND VERBAL FEEDBACK¹

CATHERINE S. FICHTEN²

*Dawson College
Montreal, Quebec*

JOHN WRIGHT

*Université de Montréal
Montreal, Quebec*

Investigated communication in happy and distressed married couples, in two studies. Fifty-eight couples' problem-solving behaviors were evaluated by the spouses themselves and by trained observers. Some distressed couples viewed their own videotape; others received a placebo intervention. Half of the distressed couples received written feedback before a second discussion. Results indicated that (a) distressed and happy couples differed on some behavioral measures; (b) both happy and distressed wives engaged in more negative behaviors than husbands; (c) videotape and written feedback were ineffective in altering behaviors; (d) husbands' and wives' negative behaviors were correlated highly; and (e) spouses' and observers' ratings were independent. Implications for research on marriage and for behavioral couple therapy are discussed.

Two studies were conducted to answer the following questions: In what ways do happy and distressed couples differ in their problem-solving behavior? Do husbands and wives communicate differently? Are videotape and verbal feedback, two techniques frequently used in behavioral couple therapy, effective in improving spouses' problem-solving behaviors?

Published reports in this area have a number of limitations (Birchler, 1979; Fichten & Wright, 1983). The present studies differ from others in a variety of ways. The unhappy sample was severely distressed. Spouses discussed their own rather than hypothetical problems. Husbands' and wives' scores were not lumped together, but were examined separately. Both spouses' and trained coders' ratings of the same behaviors were obtained in order to investigate the relationship between observers' and spouses' evaluations. Couples were followed up 6 months after testing in order to determine the effects of participation. The major goal of therapy component analyses is to discover which techniques are most effective in teaching couples to improve their relationship. In almost all of the research, training packages that contain a variety of treatment components have been used. In the present investigation, the effects of videotape and of verbal feedback on communication are not confounded by other variables and, thus, can be evaluated independently.

STUDY I

METHOD

Subjects

Ss were 28 married couples (56 Ss), 20 of whom volunteered in response to media publicity and 8 of whom were referred from clinical sources. Couples in this study were participating in a larger project; this is described by Fichten (1979, Note 1). Of 69 interested couples who returned completed questionnaires, the 10 couples whose couple-mean scores were 110 or more on the Marital Adjustment Scale (MAS) (Locke & Wallace, 1959) were designated Happy, while the 18 couples whose MAS scores fell below 80 were designated Distressed.

The mean MAS score for the 20 Happy Ss was 123 and for the 36 Distressed Ss was 63. Ss ranged in age from 21 to 61; the mean was 39 years for husbands and 36 for wives.

¹This manuscript is based in part on the first author's doctoral dissertation research, conducted at McGill University. Thanks are due to L. Fox, R. Amsel, J. Fichten, the Martoses, and the student coders.

²Reprint requests should be sent to Catherine Fichten, Department of Psychology, Dawson College, 350 Selby Street, Montreal, Quebec, Canada H3Z 1WF.

Ss had an average of 13 years of education. Couples had been married between 1 and 30 years, with a mean duration of 13 years; they had an average of 2 children. There were no significant differences between the two groups on any of these measures. Sixty-seven percent of couples in the Distressed sample had received marital therapy, while none in the Happy sample had done so.

Apparatus and Physical Setting

Couples were located in a room comfortably furnished with two armchairs located at 60° to each other, coffee tables, and plants. It contained a Shure microphone and Sony video equipment. A mike mixer was used to mix speech with interval signals on the videotapes. The interval signals consisted of 1200 Hz tones of .15 second duration every 6 seconds. The *E* and her assistant, in an adjoining room, were allowed continual visual and auditory monitoring of the couple.

Questionnaire Measures

Marital Adjustment Scale (MAS). The MAS (Locke & Wallace, 1959) was used as one of the two screening instruments. It is a 15-item self-report inventory that requires that each spouse evaluate various aspects of married life. The test has demonstrated good test-retest reliability and discriminative validity and is the most frequently reported measure of marital satisfaction.

Primary Communication Inventory (PCI). Navran's (1967) shortened version (25 items) of the PCI was included as a questionnaire measure of communication between spouses. As this self-report instrument also has been shown to distinguish happy from distressed couples (Navran, 1967), it provides an additional index of marital satisfaction.

Marital Conflict Form. This is an instrument designed by Weiss and Margolin (1977), which lists 26 common areas of disagreement between spouses.

Description of Problem Areas. This form was designed to allow Ss to specify those aspects of their spouse's behavior that they found most distressing and that they would like their partner to change.

Self and Spouse Ratings. Two questionnaires were constructed to assess Ss' perceptions of their own and their spouse's behaviors during disagreement. Sixteen items constructed in 10-point Likert type format were designed to assess Ss' perceptions of the frequency of occurrence of the eight positive and eight negative behaviors evaluated by observers during the videotaping phase of the study.

Observational Measures

A modified version of the Oregon group's (Hops, Wills, Patterson, & Weiss, Note 2) Marital Interaction Coding System (MICS) was used by trained observers to categorize videotaped dyadic interaction into 17 verbal and nonverbal codes. The MICS was modified as follows. Only 17 codes were used. These were grouped, a priori, into three categories: Neutral, Productive, and Counterproductive, and included both verbal and nonverbal codes. The composition of these categories is similar to the groupings made by Jacobson (1978) and Vincent, Weiss and Birchler (1975), and is detailed in Table 1. In order to effectively use 17 instead of 29 codes, the code definitions were altered slightly.

The recording system itself also was modified. The Oregon MICS uses frequency counts, with the sentence or "utterance" as the unit of behavior. As the joint usage of time and event sampling frequently yields more extensive information than either technique alone (Plutchik, 1974), the present recording system used 6-second intervals within which any of the 16 Productive and Counterproductive coded behaviors was rated as either having occurred or not occurred. The Neutral code Activity (AC) was used only

when no other coded behaviors occurred. The information obtained, although expressed as rate per minute scores, reflects the use of both time and event sampling.

Videotapes of interaction between spouses were coded according to the modified MICS by 6 undergraduate observers who had been trained to a minimum criterion of 77% interrater agreement, averaged over codes. Percentage agreements are based on interval-by-interval computation. Reliability of coding was determined for each rater by the method recommended by O'Leary and Kent (1973). The average interrater reliability after training was 79%; approximately 35 hours of training were required to reach this criterion. As suggested by Johnson and Bolstad (1973), periodic booster sessions were held throughout the study to keep reliability at a satisfactory level. Coders were informed that their performance would be monitored. Random covert spot-check reliability of the 6 coders was 71% (range = 70% to 73%). These reliabilities compare favorably with those reported by others (Jacobson, 1978; Margolin & Weiss, 1978; Vincent, Friedman, Nugent, & Messerly, 1979). Coders were blind to the experimental condition of the couples whose videotapes they rated.

TABLE 1
Modified MICS Categories and Codes

Neutral	Productive	Category
		Counterproductive
AC Activity	AG Agreement	CP Complaint
	AP Approval	CR Criticism
	AR Acceptance of Responsibility	DG Disagreement
	CS Compromise Solution	DR Denial of Responsibility
	HU Humor/Tension Release	EX Excuse
	PA Physical Affection ^a	IN Interrupt
	PS Positive Solution	PU Put-Down
	VA Verbal Affection	TO Turn-Off ^a

^aNonverbal codes.

Procedure

Prior to being seen in the laboratory, all Ss completed the MAS, PCI and the Marital Conflict Form. Twenty-eight couples each were seen for one 3½-hour laboratory session. The project, described as a study of communication in marriage, was explained to Ss. All couples agreed to carry out the tasks. In an attempt to equate Ss' experience with videotape, all couples were videotaped during a 10-minute unstructured interview that concerned some neutral aspects of their relationship. Couples subsequently were shown their videotape.

Spouses completed the Description of Problem Areas forms on which four topic areas were specified; these were selected from those items on the Marital Conflict Form that both spouses previously had indicated as mildly or moderately problematic in their relationship. Severe problems and certain topic areas, such as sexual adjustment and extra-marital affairs, were not selected. Specificity and compatibility of change requests were criteria used to select the one topic for discussion. Couples were videotaped for 10 minutes while attempting to resolve the problem. Spouses then completed the Self and Spouses Ratings, basing their answers on the discussion just concluded.

Once all tasks were completed, couples were debriefed extensively. Those who wished to view the videotape of their discussion were shown this. During debriefing, the value of the information furnished by Ss in advancing scientific knowledge and in improving couple therapy was emphasized. Typically, a general discussion of common

communication strengths and weaknesses ensued and good problem-solving and communication strategies were discussed extensively. Couples interested in therapy were furnished with a list of social service and hospital marital therapy agencies. Six months after their participation in the study, all couples were mailed a variety of questionnaires, including the MAS. Completed questionnaires were returned by 23 Ss: 17 Distressed and 6 Happy.

RESULTS

Questionnaire Measures

Analysis of variance (ANOVA) comparisons (2 Gender \times 2 Happiness) showed that Happy and Distressed couples differed on PCI scores, $F(1,52) = 62.60$, $p < .001$, with Happy couples ($M = 100.60$) scoring higher than Distressed ones ($M = 80.83$), and on the number of problem areas indicated on the Marital Conflict Form, $F(1,52) = 25.81$, $p < .001$, indicating that while Happy couples disagreed on an average of only 9 of the 26 possible topics, Distressed couples disagreed on 16. There were no sex differences on either of these measures.

Communication Behaviors

ANOVA (2 Gender \times 2 Happiness) comparisons were made on natural log transformed Productive and Counterproductive category scores as well as on each of the 16 individual code frequencies. The only significant differences between Happy and Distressed couples were that Happy couples Agreed, $F(1,52) = 14.12$, $p < .001$, Disagreed, $F(1,52) = 6.33$, $p < .05$ and used Humor, $F(1,52) = 6.52$, $p < .05$, more often and Criticized less often, $F(1,52) = 10.49$, $p < .01$, than Distressed couples.

Sex Differences

Findings on Gender main effects indicate that wives Agreed, $F(1,52) = 5.81$, $p < .05$, less often than husbands and that they Complained, $F(1,52) = 10.38$, $p < .01$, Criticized, $F(1,52) = 4.10$, $p < .05$, and Disagreed, $F(1,52) = 9.69$, $p < .01$, more often than their spouses. A significant interaction was found on the Denial of Responsibility variable, $F(1,52) = 13.15$, $p < .001$. Means indicate that Distressed wives and Happy husbands were relatively more likely to Deny Responsibility than Distressed husbands and Happy wives.

TABLE 2

*Pearson Product-moment Correlation Coefficients: Relationships
Between Productive and Counterproductive Behaviors*

Variables	Males		Females	
	Productive	Counterproductive	Productive	Counterproductive
Males				
Productive		-.032	+.452*	-.059
Counterproductive	-.461		-.232	+.576**
Females				
Productive	+.224	-.397		-.467
Counterproductive	-.529	+.900***	-.326	

Note.—Distressed couples' coefficients above, Happy couples' below the diagonal. Distressed $df = 16$; Happy $df = 8$. Significance levels based on one-tailed test.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Relationships Between Productive and Counterproductive Behaviors

Correlations between husbands' and wives' Productive and Counterproductive category frequency scores were computed. The Pearson product-moment correlation coefficients in Table 2 indicate that the strongest relationship obtained is that between husbands' and wives' Counterproductive behaviors. The relationship between Ss' and observers' ratings of the same behaviors also was examined. Correlation coefficients indicate that Ss' and observers' ratings are independent.

Follow-up

Six Happy and 17 Distressed Ss returned follow-up questionnaires. There were no significant differences between pretest and follow-up MAS scores for either Happy or Distressed spouses.

STUDY 2

Although there were few behavioral differences between Happy and Distressed couples, the literature indicates that behavioral changes on the MICS parallel increases in marital satisfaction (Jacobson, 1978). The second study assessed the effects of brief videotape and instructional written feedback on communication behaviors in average and distressed couples. Couples were videotaped from three vantage points: Both spouses together, husband alone, and wife alone. After discussion, spouses were presented either a no video placebo intervention or videotape playback from their own, their spouse's or an observer's vantage point. Half of the couples in each condition also were given written feedback. All couples engaged in a second discussion. Dependent variables included behavioral ratings and self-report data.

METHOD

Subjects

Ss were 48 married couples (96 Ss) of average to extremely poor marital adjustment (the 18 distressed couples who participated in Study 1 were part of the sample). Recruitment procedures were the same as in Study 1. Couples in this study also were participating in a larger project described by Fichten (1979; Note 1). Fifty-one couples with couple-mean scores of 105 or less on the MAS and 110 or less on the PCI were selected as Ss. Three couples had to be dropped from the sample due to illness or equipment failure. Couples were assigned randomly to eight experimental conditions.

The mean MAS score for the 96 Ss was 82.5, and mean PCI score was 87.8. Ss ranged in age from 20 to 62; the mean was 37 years for husbands and 35 for wives. Ss had an average of 13 years of education. Couples had been married between .5 and 31 years, with a mean duration of 11.6 years; they had an average of 2 children. Forty-eight percent of couples had received marital therapy. There were no significant differences among the eight experimental groups on any of these measures.

Procedure

The procedure was the same as that in Study 1, with the following exceptions. As two problem-solving discussions were to be videotaped, two topics were selected from the four that couples described on the Description of Problem Areas form: a coin was tossed to determine which one would be used for the first and second discussions.

While couples completed the first 10-minute videotaped problem-solving session, the discussion was monitored and coded according to the modified MICS by the experimenter and her trained coder assistant. Both were blind to the experimental condition of the couple. After 10 minutes of discussion, couples completed the Self and Spouse Ratings. All couples then were informed that the next task consisted of reflecting on the

previous discussion for 10 minutes, as such reflection is helpful in learning about communication. Couples in the No Video Placebo condition did this by spending 10 minutes writing down their impressions of the discussion and of their own and their spouse's behaviors. Couples in the three video conditions were told that they would do this by watching videotapes. Ss in the Video Self condition saw an image of themselves only, those in the Video Spouse condition saw their spouse only, while those in the Video Both condition saw themselves as a couple. The visual image included one or both Ss from the knees up. Each S viewed the videotape on his or her own television monitor. Spouses were sitting back-to-back wearing headphones. Each spouse heard both sides of the conversation in all video conditions. After the 10 minutes of "reflection" and completion of Self and Spouse Ratings, half of the couples in each condition were presented with a written evaluation of their communication skills; this contained individualized feedback for each S. Feedback was based on behavioral ratings of spouses' communication skills during the first discussion. Feedback items were based on the 16 behavioral codes used to rate videotapes and were broken down into two categories: Facilitative and Disruptive. Two kinds of "Facilitative" feedback were given: Frequent Positive Behaviors and Rare Negative Behaviors. Ss were instructed to maintain these rates. The "Disruptive" feedback category also consisted of two divisions: Frequent Negative Behaviors and Rare Positive Behaviors. The instructions specified that these behaviors should be decreased and increased, respectively. The number of Facilitative feedback items was equated for husband and wife, as was the number of Disruptive items. Each S received the feedback evaluation of both the husband and the wife. Ss indicated the accuracy of each feedback item on a 10-point scale.

All couples were told to make use of whatever insight or information they had gained about their communication and then attempted to resolve the second problem. This discussion also was videotaped, and couples again completed the Self and Spouse Ratings, basing their answers on the second discussion session. As in Study 1, after the experimental phase of the study couples were debriefed extensively. Those interested in therapy were furnished with a list of social service and hospital couple therapy agencies. Six months after their participation in the study, all couples were mailed a variety of questionnaires, including the MAS. Completed questionnaires were returned by 51 Ss (53%).

RESULTS

Sample Characteristics

One-way ANOVA comparisons showed no significant differences between the experimental groups on any of the demographic or screening measures, or on the modified MICS Productive and Counterproductive category frequencies during the pretest discussion session. As indicated in Table 3, the most frequently reported problems on the Marital Conflict form were temperament and personality differences, affection and closeness, personal habits, recreation and leisure time, sexual adjustment, and acceptance-rejection.

Sex Differences

Sex differences were not found in MAS scores, PCI scores or in the number of Areas of Disagreement. Although no sex difference was found in modified MICS Productive category behaviors, Females were found to emit more Counterproductive behaviors than did Males during the pretest discussion session, $t(94) = 3.021, p < .01$. To understand better these differences, a posteriori t -tests were performed on all individual codes; wives were found to Complain (CP), $t(94) = 3.669, p < .001$, and Criticize (CR), $t(94) = 2.642, p < .05$, more often and to Accept Responsibility (AR) less often, $t(94) = 2.214, p < .05$, than their husbands. There was also a tendency for wives to agree (AG) with their husbands less frequently, $t(94) = 1.890, p < .07$.

Effects of Videotape and Instructional Written Feedback on Communication Behaviors and Feedback Accuracy Ratings

Because no pretest group differences were found, ANOVA comparisons (2 Gender \times 4 Video \times 2 Feedback) were made on natural log transformed Productive and Counterproductive category change scores. No significant main effects or interactions were found. Weinrott (1976) made a strong case for cumulating frequency data from observational codes, which have different means and standard deviations, only after the frequencies have been transformed to standard (*z*) scores. Thus, ANOVA comparisons were made on *z* scores. Again, no significant differences were found.

It was hypothesized that video viewing would affect *Ss*' judgments about the accuracy of written feedback given them. To test this hypothesis, *Ss*' assessments of accuracy of the evaluations of husband's and wife's communication skills were averaged across codes in each of the four feedback divisions. *Ss*' judgments concerning the accuracy of the feedback given to them and their spouse were computed separately. ANOVA comparisons indicated no significant main effects or interactions.

TABLE 3
*Rank Order of Problem Frequency
on Marital Conflict Form*

Rank	%	Topic
1	97	Temperament and Personality Differences
2	95	Affection and Closeness
5	81	Acceptance—Rejection
3	89	Personal Habits
6	79	Family Recreation and Leisure Time
11	59	Child Care and Training
4	82	Adult Recreation and Leisure Time
8	70	Traditional versus Contemporary Outlook
5	81	Sexual Adjustment
7	74	Friends
9	69	Finances and Money Management
13	56	Husband's Work
16	45	Jealousy and Extramarital Affairs
10	68	Household Management and Decision Making
15	48	Husband's Mother
14	51	Other Relatives and Dependents (not parents)
17	40	Religion
12	57	Health
15	48	Wife's Mother
19	35	Wife's Working
21	27	Politics
12	57	Personal Improvement
18	39	Education
20	31	Wife's Father
23	24	Charity
22	26	Husband's Father

Because it was possible that video and written feedback had differential effects on behaviors in different codes, especially on nonverbal behaviors (Eisler, Hersen, & Agrad, 1973), the effects of video and of instructional written feedback on behaviors in each of the 16 individual codes were examined separately in post-hoc tests. Change scores based on natural log transformed frequencies were used in ANOVA comparisons (2 Gender \times 4 Video \times 2 Feedback). Only one significant main effect was found in the 16 code-by-code comparisons; this showed that Ss given instructional written feedback decreased the number of Put-Downs (PU) they emitted compared to Ss not given feedback, $F(1,80) = 6.255$, $p < .05$. Significant three-way interactions were found on four tests (CR, EX, AP, HU codes). Tests of simple effects on these interactions did not reveal consistencies. The effects of videotape and instructional written feedback on those behaviors singled out for feedback also were evaluated. Again, no significant differences were found.

Relationships Between Productive and Counterproductive Behaviors

Correlations between husbands' and wives' pre- and posttest Productive and Counterproductive category frequency scores were computed. Pearson product-moment correlation coefficients in Table 4 indicate that the strongest relationships obtained are those between pre- and posttest Productive behaviors and those between pre- and posttest Counterproductive behaviors. The Productive behaviors of husbands and wives also are related closely, as are their Counterproductive ones. However, there appears to be no significant relationship between Productive and Counterproductive behaviors. This is true both for husbands and for wives, as well as between spouses. No significant correlations were found between observers' and Ss' ratings of the husband's or of the wife's behaviors for any of the testing times.

TABLE 4
Relationships Between Productive and Counterproductive Behaviors

Variables	Males				Females			
	Pretest		Posttest		Pretest		Posttest	
	Prod.	Counter.	Prod.	Counter.	Prod.	Counter.	Prod.	Counter.
Males								
Pre-test								
Prod.		-.087	+.479***	+.057	+.229	-.172	+.273*	-.091
Counter.			+.075	+.641***	+.106	+.497***	+.048	+.489***
Post-test								
Prod.				-.070	+.182	-.069	+.471***	-.181
Counter.					-.022	+.463***	+.129	+.532***
Females								
Pre-test								
Prod.						-.212	+.306*	-.109
Counter.							-.039	+.715***
Post-test								
Prod.								-.231
Counter.								

Note.— $df = 46$. Pearson product-moment correlation coefficients are based on rate per minute scores. Significance levels based on one-tailed tests.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Follow-up

Fifty-one Ss (53%) returned follow-up questionnaires; their average pretest MAS score was 82.2, which is very similar to the mean MAS score of the whole sample (82.5). In response to a question that concerned the effects of participation in the study on the couple's marital relationship, 2 (4%) Ss indicated that participation in the study resulted in substantial improvement, 19 (38%) stated that participation resulted in some improvement, while 29 (58%) reported no changes. One S did not answer this question. None of the Ss indicated that participation in the study caused deterioration. During debriefing, some Ss saw additional videotapes of themselves. Therefore, only the effects of written feedback were examined at follow-up. In an ANOVA comparison of changes in MAS scores, no significant differences were found.

DISCUSSION

Happy and Distressed Couples

While paper-and-pencil measures discriminated happy and distressed couples, relatively few behavioral differences were found. No differences were found in positive or in negative nonverbal behaviors, nor in global positive and negative verbal behaviors. When individual behavior codes were examined, significant differences were found in only four codes: happy couples agreed, disagreed and used humor more often and criticized less often than did distressed couples. These results are consistent with those of Koren, Carlton and Shaw (1980) who found, using a different coding system, that happy couples criticized less often and acknowledged or accepted the spouse's influence attempts more often than distressed couples. The present findings are also partially consistent with those of Haynes, Follingstad, and Sullivan (1979), who also found differences in the criticism variable.

The findings of the present study, when considered together with those of other investigations, suggest that behavioral differences, at least given the current state of the art in coding systems, are not very robust. The only reasonably consistent difference across studies has been the criticism variable. Findings that indicate differences in global summary verbal or nonverbal categories are not well replicated and, more importantly, are not likely to be helpful to therapists who must focus on individual specific behaviors. Other directions, such as the analysis of the topography of conflict resolution (e.g., Billings, 1979; Gottman, Markman & Notarius, 1977; Margolin & Wampold, 1981), consideration of life cycle and demographic variables (e.g., Margolin, 1981), and closer examination of sex differences will have to be explored.

Other investigators (Gottman, Notarius, Markman, Bank, & Yoppi, 1976; Koren et al., 1980; Margolin & Weiss, 1978) have argued that subjective variables, such as the meaning of specific behaviors, need to be taken into account. The present study's finding of no relationship between Ss' and observers' ratings of the same behaviors also suggests that cognitive differences, especially as these relate to communication behaviors, will have to be explored.

Effects of Videotape and Instructional Written Feedback

The results of Study 2 indicate that neither videotape nor instructional written feedback effected any significant changes in either the Productive or Counterproductive behaviors of couples. Analyses of the data on individual codes also suggest that videotape and instructional written feedback were not effective in altering either verbal or nonverbal behaviors. Nor were there differences due to videotape in spouses' judgments of the accuracy of feedback given them.

Several possible explanations can be proposed for these results. The brevity of the treatment, the motivation of volunteer couples, and the sequencing of the videotape and written feedback interventions all may have been contributing factors. We do not,

however, believe that these were the crucial variables. For example, other investigators (e.g., Arnkoff & Stewart, 1975; Carter & Thomas, 1973; Eisler et al., 1973) have reported positive outcomes with extremely brief interventions. The motivation of volunteers is always suspect; nevertheless, volunteer Ss in therapy analogue studies have been found to change. Although there is no direct evidence on the importance of the sequencing of treatment components, it is possible that had instructional written feedback been provided prior to videotape feedback, Ss might have focused on the specific behaviors targeted for treatment and, therefore, may have made changes in these behaviors. As the behavioral effects of video and instructional written feedback rarely have been investigated independently of one another or of other treatment components, this possibility has yet to be investigated. What feedback to give, how to give it, at what point in therapy to provide it, and how much feedback to administer at one time are questions that have yet to be answered. Nevertheless, the sequencing of these two interventions does not account for absence of videotape and written feedback main effects.

That video playback and instructional written feedback did not have any effects on observed behavior or on ratings of feedback accuracy may be explained best in terms of the cognitive and motivational biases of distressed spouses. For example, Kipper and Ginot (1979) found that accuracy of evaluating videotape replay of one's own behavior is related to defensiveness. Furthermore, Fichten's (1979, Note 1) data on cognitive differences between happy and distressed spouses indicate that while happy spouses perceive their partner as superior or at least as skilled at communication as they themselves are, distressed spouses view themselves as more skilled and see their spouse's behavior as caused by stable personality characteristics. Spouses who believe that they are more skilled than their partner and who attribute their partner's actions to stable personality characteristics may not expect behavioral changes from their mate or be motivated to improve their own communication skills. Indeed, Margolin and Weiss (1978) found that the use of behavioral techniques alone was no more effective than non-specific treatment, while both of these were inferior to a combination of behavioral and cognitive techniques in improving marital satisfaction.

Relationships Between Behaviors

The significant correlations obtained between pre- and posttest behaviors, both Productive and Counterproductive, indicate that Ss' behaviors in both of these categories are relatively stable over time and problem topic. As Gottman et al. (1976) noted, correlations between spouses' behaviors do not necessarily imply reciprocity. Nevertheless, the findings that the behaviors of husbands and wives are correlated significantly may reflect reciprocity, similarity, or modelling by spouses and suggests that the alteration of one spouse's behavior may be accompanied by similar changes in the behavior of the partner.

In the distressed sample, Productive and Counterproductive behaviors were shown to be unrelated, both within Ss and between spouses. Based on different types of data, these results are similar to those of Jacobson and Moore (1981), who found little relationship between pleasant and unpleasant behaviors reported by spouses on a daily basis. Recent approaches to behavioral marital therapy have focused on the acceleration of positive behaviors (e.g., Stuart, 1975). As increases in positive behaviors may not be accompanied by decreases in negative ones, programs to decrease negative communication behaviors also should be developed, especially because distressed spouses' satisfaction with their relationship seems to be related closely to rates of displeasing behaviors (Jacobson, Waldron, & Moore, 1980).

Behaviors Rated by Observers and Spouses

The low correspondence found between Ss' ratings of their own and their spouse's behaviors and observers' ratings of the same behaviors may have been due to cognitive

and motivational variables or to the complexity of the interaction that spouses were evaluating. The present findings suggest that investigators and therapists should not presume agreement between these two discrepant sources; agreement should be ascertained, rather than assumed, both in therapy and in research.

Sex Differences

Both happy and distressed wives were found to emit more Counterproductive behaviors than husbands. Code-by-code examination of sex differences in both studies indicates that wives Agreed less often than their husbands, while they Complained and Criticized more frequently. These results are similar to those reported by Margolin and Wampold (1981); these authors also found that wives engaged in more negative behaviors, especially in complaining and criticizing. Such differences might be interpreted best as a reflection of the discrepancy between the marital roles and needs of husbands and wives.

The husband, typically regarded as the more powerful member of the marital dyad because he often controls essential resources, such as prestige and money, usually provides economic support and status in return for a variety of emotional and physical services rendered by the wife (Murstein & Beck, 1972; Safilios-Rothschild, 1976). In coercive social exchanges between spouses, the husband has the option to exercise control over his wife through tactics such as withholding money and vetoing purchases. The husband can also use coercive strategies such as going home late and physical force, options usually unavailable to women. Men are often more involved in their job than are working wives and, thus, have available sources of gratification outside the home, as well as inside.

Although these roles are changing, women often have the primary responsibility for child care and for the day-to-day needs of the family. Because wives are often more concerned about the home and the marriage, it has been argued (e.g., Bell, 1975) that the wife's satisfaction with life is more dependent on the marital relationship than is the happiness of the husband. Murstein and Beck's (1972) data provide some support for this view. These investigators found that the satisfaction of wives with their marriage was much more dependent on how they saw their husbands than was the case for how husbands saw their wives.

Because women are more involved in the home, it is likely that the outcome of domestic disputes has greater impact on the wife than on the husband. In the attempt to influence the outcome of disagreements that concern household matters, wives would be expected to use more potent behavior control tactics than husbands; wives have more at stake and fewer alternate control strategies. As troubled couples tend to rely on aversive control techniques, wives from distressed relationships would be expected to use coercive tactics during arguments more often than husbands. In the behavioral approach to marriage, sex differences generally have been ignored; a consideration of the differing roles and needs of husbands and wives may produce interesting findings.

CONCLUSION

Although some differences were found between distressed and happy couples, the problem-solving behaviors of many distressed couples were equivalent to or better than those of happy ones. As wives were found to engage in more negative behaviors, behavioral norms for males and females should be compiled separately to enable therapists to make a thorough assessment of spouses' communication behaviors. Current approaches to behavioral marital therapy still are influenced by the "uniformity myth." Although distressed couples argue more often, inadequate communication skills may characterize only some distressed couples; others' difficulties, as indicated by Fichten's (1979, Note 1) data on cognitive differences, may be due to faulty self- and spouse

perceptions and causal attributions. The addition of cognitive interventions to standard behavioral couple therapy may enhance the effects of behavioral training (Margolin & Weiss, 1978).

The absence of videotape and written feedback effects suggests that videotape, with or without verbal feedback, is not the panacea that one would expect from reading the plethora of optimistic case studies. In future studies, investigators should examine systematically the independent effects of videotape and written feedback when these techniques are combined with other commonly used ingredients such as modelling and role play. The effects of the sequencing of interventions and the amount and timing of feedback also need to be evaluated.

Rubin and Mitchell (1976) warned that research on couples may be reactive and may have deleterious effects on the relationship between spouses. The present study found no evidence of such deterioration. Follow-up data indicate that of those who returned completed questionnaires, none indicated that participation in the study caused any deterioration in their relationship. Indeed, 42% of respondents indicated that participation resulted in some improvement. Although not a guarantee of safety, the follow-up results do suggest that the risks of using videotape and of studying marital interaction are not overwhelming.

REFERENCE NOTES

1. FICHTEN, C. S. See it from my point of view: Videotape and attributions in happy and distressed couples. Manuscript submitted for publication, 1982.
2. HOPS, H., WILLS, T., PATTERSON, G., & WEISS, R. Marital Interaction Coding System. University of Oregon Research Institute, 1977 (NAPS Document No. 02077).

REFERENCES

- ARNKOFF, D. B., & STEWART, J. The effectiveness of modeling and videotape feedback on personal problem solving. *Behavior Research and Therapy*, 1975, 13, 127-133.
- BELL, R. R. *Marriage and family interaction* (4th ed.). Homewood, Ill.: Dorsey, 1975.
- BILLINGS, A. Conflict isolation in distressed and non-distressed married couples. *Journal of Consulting and Clinical Psychology*, 1979, 47, 368-376.
- BIRCHLER, G. R. Communication skills in married couples. In H. Bellack & M. Hersen (Eds.), *Research and practice in social skills training*. New York: Plenum, 1979.
- CARTER, R. D., & THOMAS, E. J. Modification of problematic marital communication using corrective feedback and instruction. *Behavior Therapy*, 1973, 4, 100-109.
- EISLER, R. M., HERSEN, M., & AGRAS, W. S. Effects of videotape and instructional feedback on non-verbal marital interaction: An analog study. *Behavior Therapy*, 1973, 4, 551-558.
- FICHTEN, C. S. Videotape and verbal feedback: Effects on behavior and attributions in distressed couples. (Doctoral dissertation, McGill University, 1978). *Dissertation Abstracts International*, 1979, 39, 4576B.
- FICHTEN, C. S., & WRIGHT, J. Videotape and verbal feedback in couple therapy: A review. *Journal of Clinical Psychology*, 1983, 39, 216-221.
- GOTTMAN, J., MARKMAN, H., & NOTARIUS, C. The topography of marital conflict: A sequential analysis of verbal and non-verbal behavior. *Journal of Marriage and the Family*, 1977, 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.
- HAYNES, S., FOLLINGSTAD, D., & SULLIVAN, J. Assessment of marital satisfaction and interaction. *Journal of Consulting and Clinical Psychology*, 1979, 47, 789-791.
- JACOBSON, N. S. Specific and non-specific factors in the effectiveness of a behavioral approach to the treatment of marital discord. *Journal of Consulting and Clinical Psychology*, 1978, 46, 442-452.
- JACOBSON, N. S., & MOORE, D. Spouses as observers of the events in their relationship. *Journal of Consulting and Clinical Psychology*, 1981, 49, 269-277.
- JACOBSON, N. S., WALDRON, H., & MOORE, D. Toward a profile of marital distress. *Journal of Consulting and Clinical Psychology*, 1980, 48, 696-703.

- JOHNSON, S. M., & BOLSTAD, O. D. Methodological issues in naturalistic observation: Some problems and solutions for field research. In L. A. Hamerlynck, L. C. Handy & E. J. Mash (Eds.), *Behavior change: Methodology, concepts and practice*. Champaign, Ill.: Research Press, 1973.
- KIPPER, D. A., & GINOT, E. Accuracy of evaluating videotape feedback and defense mechanisms. *Journal of Consulting and Clinical Psychology*, 1979, 47, 493-499.
- KOREN, P., CARLTON, K., & SHAW, D. Marital conflict: Relations among behaviors, outcomes and distress. *Journal of Consulting and Clinical Psychology*, 1980, 48, 460-468.
- LOCKE, H. J., & WALLACE, K. M. Short marital adjustment and predition tests: Their reliability and validity. *Marriage and Family Living*, 1959, 21, 251-255.
- MARGOLIN, G. Behavior exchange in happy and unhappy marriages: A family cycle perspective. *Behavior Therapy*, 1981, 12, 329-343.
- MARGOLIN, G., & WAMPOLD, B. Sequential analysis of conflict and accord in distressed and non-distressed marital partners. *Journal of Consulting and Clinical Psychology*, 1981, 49, 554-567.
- MARGOLIN, G., & WEISS, R. L. Comparative evaluation of therapeutic components associated with behavioral marital treatment. *Journal of Consulting and Clinical Psychology*, 1978, 46, 1476-1486.
- MURSTEIN, B. I., & BECK, G. D. Person perception, marriage adjustment and social desirability. *Journal of Consulting and Clinical Psychology*, 1972, 39, 396-403.
- NAVRAN, L. Communication and adjustment in marriage. *Family Process*, 1967, 6, 1973-1980.
- O'LEARY, K. D., & KENT, R. Behavior modification for social action: Research tactics and problems. In L. A. Hamerlynck, L. C. Handy, & E. J. Mash (Eds.), *Behavior change methodology, concepts and practice*. Champaign, Ill.: Research Press, 1973.
- PLUTCHIK, R. *Foundations of experimental research* (2nd ed.). New York: Harper & Row, 1974.
- RUBIN, Z., & MITCHELL, C. Couples research as couples counselling: Some unintended effects of studying close relationships. *American Psychologist*, 1976, 31, 17-25.
- SAFILOS-ROTHCHILD, C. A macro and micro examination of family power and love: An exchange model. *Journal of Marriage and the Family*, 1976, 38, 355-362.
- STUART, R. B. Behavioral remedies for marital ills: A guide to use of operant interpersonal techniques. In A. S. Gurman & D. G. Rice (Eds.), *Couples in conflict: New directions in marital therapy*. New York: Jason Aronson, 1975.
- VINCENT, J. P., FRIEDMAN, L., NUGENT, J., & MESSERLY, L. Demand characteristics in observations of marital interaction. *Journal of Consulting and Clinical Psychology*, 1979, 47, 493-499.
- VINCENT, J. P., WEISS, R. L., & BIRCHLER, G. R. A behavioral analysis of problem solving in distressed and non-distressed married and stranger dyads. *Behavior Therapy*, 1975, 6, 475-487.
- WEINROTT, M. Observation training and practice: Effects on perception and behavior change. (Doctoral dissertation, McGill University, 1975). *Dissertation Abstracts International*, 1976, 36, 5291.
- WEISS, R. L., & MARGOLIN, G. Assessment of marital conflict and accord. In A. R. Ciminero, K. S. Calhoun, & A. Adams (Eds.), *Handbook for behavioral assessment*. New York: John Wiley, 1977.

Copyright of Journal of Clinical Psychology is the property of John Wiley & Sons Inc.. The copyright in an individual article may be maintained by the author in certain cases. Content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.