Test Of The Effectiveness Of Attributional Feedback In Reducing Negative Behavior In Distressed Couples

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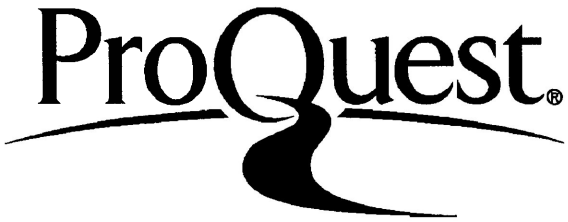

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Abstract

A noted feature of distressed couples is that their conflict discussions begin normally but soon escalate into negative exchanges. They tend to attribute their conflict to the negative personality traits of their partner, and view their own negative actions as justified reactions to their partner's behavior. In the present study ten couples discussed high conflict issues and received video and verbal feedback about their attributional discrepancies on three occasions over one month. Videotapes of the discussions and self-report measures were analyzed to determine whether the feedback was effective in reducing negative conversational behavior. It was found that couples: (1) accepted more responsibility for the conflict across sessions; (2) exhibited less negative reciprocity on session 3 than on session 2, and more positive reciprocity in session 3 than in the earlier sessions; and (3) reported feeling that they were more successful in resolving sessions 2 and 3 than session 1 However, the results were generally quite weak and it was concluded that there was only tentative support for the use of video and attributional feedback in assisting distressed couples.

A Test Of The Effectiveness Of Attributional Feedback In Reducing Negative Behavior In Distressed Couples

Introduction

Marital distress is a rising concern in today's society. The divorce rate has been increasing dramatically in the past twenty years, and marital problems now rank among the first reasons why people seek counselling. Fitzpatrick (1987) noted that the high divorce rate did not indicate discontent with the institution of marriage per se but rather with the particular spouse. Marital distress is often linked to psychological problems in general, affecting not only the spouses themselves, but also their children (Follette & Jacobson, 1985). Mental health professionals have thus become increasingly concerned with understanding and treating marital discord. Communication problems are frequently the reason why couples seek therapy to improve their relationship (Birchler, 1979). Analyzing the communication of spouses may reveal important dynamics of marriage, as well as important components of interpersonal communication (Fitzpatrick, 1987; O'Leary & Smith, 1991).

Studies of marital communication have repeatedly revealed evidence for a connection between marital distress and problems in communication (Schaap, 1984, Weiss, 1978). What remains unclear is the nature of this relationship. Marital distress may reflect negative spouse behavior that couples agree exist, or it may reflect negative spouse behavior that one partner merely perceives as existing (Epstein, Pretzer & Fleming, 1987).

A striking feature of the communication of distressed couples' is that their conversations usually begin normally, but conventional patterns of interaction soon break down, and communication becomes less orderly, clear and relevant, and increasingly impulsive, emotional, and aggressive (Halford & Sanders, 1990; O'Leary & Smith, 1991; Sillars & Weisberg, 1987). Epstein (1982) described couples in distressed relationships as typically having misperceptions and unvalidated assumptions about their partner's behavior. Interactions tend to be characterized by a "regressive spiral" of confront-confront, confront-defend, and complain-defend interactions (Ting-Toomey, 1983). Distressed couples

are more likely to reciprocate negative communication behaviors than are happy couples (Billings, 1979; Gottman, Markman & Notarius, 1977). Once a negative exchange has begun, distressed couples maintain or increase their degree of negativity (Yelsma, 1981). There is an increased sensitivity to the other person's behavior which is exhibited in rapid and extreme cognitive and behaviorial reactions (Jacobson, Follette & McDonald, 1982; Margolin, John & O'Brien, 1989).

Effective Communication

Effective communication has been described as clear, consistent, direct, supportive, focused and mutual. These are some of the characteristics frequently seen in happy or well adjusted relationships (O'Leary & Smith, 1991; Sillars & Weisberg, 1987). Another feature of positive communication is the ability to talk about differences and deal with conflict constructively (Lloyd, 1987). Merely establishing an atmosphere for comfortably negotiating conflict issues without great distress, reactivity or escalation is an important initial step for relationship partners to take (Sillars & Parry, 1982), and predicts long-term marital satisfaction (Krokoff,

1991).

Ideally, effective communication can occur only if several factors can be met. Partners should be able to (1) identify their own interests, (2) share these interests with their partner, (3) trust that their partner will hear their interests and desire to help them seek those interests, and (4) express their position clearly enough so that their partner can understand it. Then the other partner should in turn be able to (1) correctly receive and understand the message, and (2) be able to respond with a constructive reply (Peterson, 1983).

For interactions to proceed smoothly each partner must understand the other's point of view. Communication researchers have determined that individuals receive approximately 10,000 sensory perceptions per second (Watzlawick, Beavin & Jackson, 1967). Obviously, the information must be screened so that irrelevant information does not predominate. Each individual then needs to determine which information is essential and which is irrelevant. For each possible perception an analogous imperception may exist. When considering all the components necessary for effective

communication, it is surprising that accurate expression and understanding occur at all.

Ineffective Communication

In studying ineffective communication researchers have found it useful to distinguish between the "content" and "relationship" levels of communication. The relationship level is more abstract than the literal content of a message, and indicates how a message is to be taken (e.g., as an insult, command, show of disrespect). It communicates how one perceives oneself, the other person, or the relationship, and it is usually expressed nonverbally (Watzlawick, Beavin & Jackson, 1967). Past research has found that problems in relationships often stem from incongruent perceptions of the relational meaning of messages (Baucom, Sayers & Duhe, 1989; Harvey, Christensen & McClintock, 1983; Jacobson & Margolin, 1979; Sillars & Weisberg, 1987).

Studies have revealed that dysfunctional cognitions and inaccuracies in the recall and assessment of a partner's behavior may play an important role in marital distress (Berley & Jacobson, 1984; Epstein, 1982; Madden & Janoff-Bulman, 1981;

Newman, 1981; O'Leary & Smith, 1991). In order to understand marital distress and ineffective communication, attributions regarding the reasons, responsibility, momentum and aims behind behaviors should be examined (Baucom, Bell & Duhe, 1982; Epstein, 1982; Berley & Jacobson, 1984; Doherty, 1981).

Cognition and Ineffective Communication

When individuals experience stressful, enduring conflicts in intimate relationships they usually ask themselves two simple questions that affect their future attitudes and behavior: namely, "Who or what is causing the problem?", and "Can we solve the problem?" (Doherty, 1981). Research in marital therapy has looked at the role of cognitive variables, (especially attributional processes) in initiating, maintaining and treating marital discord (Berley & Jacobson, 1984; Doherty, 1981; Newman, 1981; Baucom, Bell & Duhe, 1982; Bradbury & Fincham, 1988; Camper, Jacobson, Holtzworth-Munroe & Schmaling, 1988; Fincham, Beach & Baucom, 1987; Fincham, Beach & Nelson, 1987; Fincham & O'Leary, 1983; Holtzworth-Munroe & Jacobson, 1985; Jacobson, McDonald, Follette & Berley, 1985). "Interpersonal attributions" are explanations for the behavior

patterns that occur between two people. These explanations include perceptions of self with respect to other, as well as perceptions of other with respect to self.

In interpersonal communication each person is an observer of the other person's actions. Each person has a need to know the other's intentions in order to interact accordingly (Thomas & Pondy, 1977). The simplest attribution occurs when the actor is perceived to have intended the frustrations experienced by the observer. Both parties, as they take turns being the actor and the observer, are apt to view the ongoing exchanges with respect to their own concerns, yet neither has any direct information about the other's reasoning process. Thus, the other's frustrating behavior most likely appears unjustifiable and arbitrary (Combs & Snygg, 1959).

In distressed intimate relationships there are at least two attributional biases. First, partners may fabricate overgeneralized labels to describe their partner's behavior. Second, partners tend to attribute responsibility for the conflict to the negative personality traits of their partner. Typically,

intimates minimize self-responsibility for relationship problems, and overemphasize the role that the traits and behaviors of their partner play (Sillars & Scott, 1983). This pattern frequently characterizes distressed couples, but not happy ones.

In interpersonal conflict, partners tend to view their own actions as a reaction to their partner, and their partner's actions as a reflection of their stable personality characteristics (Sillars, 1980; Sillars & Parry, 1982; Sillars & Scott, 1983). Attributions make spouses view their partner as more competitive and responsible for the conflict than others may view them. The partners tend to be fairly ineffective at viewing the mutually causal relationship that happens during conflict (Sillars, 1981). Thus, they are apt to ignore or underestimate the degree to which their own behavior affected the conflict style.

Senders and receivers tend to form different perceptions of the same messages. A conversation may begin quite normally, but at some point one individual feels unjustly attacked or criticized by the other, and this leads to retaliation (Doherty, 1981; Peterson, 1983; Roloff, 1987). The other is likely to respond in

kind, and over time this communication pattern generates increasing confirming evidence for the validity of the negative attributions about the other person (Sillars, 1985). The discussion gradually becomes centred on the relationship level (on self and other perceptions) and less focused on the initial topic of disagreement.

In sum, distorted, inaccurate or incongruent cognitions are a primary cause of negative interactional behavior (Sillars, 1985). The other person's behavior is perceived as unfavourable, unreasonable, critical or demeaning, which leads to retaliation (Peterson, 1983). Individuals tend to blame the other person for interaction difficulties and attribute more benign intent to their own behavior, which is considered innocent and justified (Fincham, Beach & Baucom, 1987; Orvis, Kelley & Butler, 1976). They tend to express their disagreements in dispositional terms, often by raising questions about the character of the other person (Peterson, 1983). They view their interactions in causal linear terms (Bernal, 1982); they become bogged down in personal attacks and self-justifications; and they fail to reach

a clear resolution on the original issue of disagreement. Not surprisingly, large-scale national studies (Hunt & Hunt, 1977; McRae & Kohen, 1988) have found that separated and divorced individuals attribute their own breakup to their former partners, and not to themselves.

Similar findings have been obtained when couples examine videotapes or transcripts of their conversations. Distressed couples observing their own interactions show less agreement in behavior ratings than do happy couples (Margolin, Hattem, John & Yost, 1985); they perceive their own behavior more favourably than does their partner (Sillars & Scott, 1983; Schaap & Jansen-Nawas, 1987), and senders of messages perceive more positive intent than do receivers of these same messages (Schachter & O'Leary, 1985). Holtzworth-Munroe and Jacobson (1988) found that when distressed couples attempted to resolve their conflicts, negative behavior attracted more attributional statements than positive behavior.

Reciprocity

Marital researchers have also discovered distinct interaction patterns which characterize distressed and

nondistressed couples (Gottman, 1979). During interactions each partner's behavior is affected by specific, reinforcing stimuli that the other partner provides (Margolin & Wampold, 1981). What often develops is a circular and ongoing influence that partners exert on each other, known as reciprocity. Reciprocity signifies that if Partner A exhibits a certain behavior toward Partner B, there is a good chance that Partner B will exhibit that same behavior toward Partner A in return (Gottman, 1979). "Positive reciprocity" indicates an increased likelihood that partners will respond with positive behaviors if those are the type they have received, than if they have not received positive behaviors. Likewise, "negative reciprocity" indicates that it is more likely that partners will respond with negative behaviors if those are the type they have received, than if they have not received negative behaviors from their partner (Margolin & Wampold, 1981).

Sequential analyses have been used to examine reciprocity among distressed and nondistressed couples (Gottman, Markman, & Notarius, 1977; Gottman & Notarius, 1978; Margolin & Wampold, 1981; Raush, 1972;

Zietlow & Sillars, 1988). While positive reciprocity has been observed among both distressed and nondistressed couples, negative reciprocity tends to be more characteristic of distressed couples.

Conflict Resolution

The above research findings have led to the suggestion that marital therapists should attempt to defuse patterns of unproductive blaming and redirect each person's attention to their own contributions to the conflictual interaction (Beck, 1987). Individuals in conflict may not intend to be critical or hurtful, or they may not even be aware of criticizing or hurting the other person. In fact, it has been found that couples in distress tend to be unaware of their attributional discrepancies (Harvey, Wells & Alvarez, 1978). According to Beck (1987), the therapist's job is to help distressed spouses determine what each does that provokes negative inferences and undesirable behaviors in the other. Indeed, change is not likely to occur as long as each party feels innocent and that the other is to blame. If couples are made aware of their attributional differences; are shown how misperceptions exacerbate conflict; and realize that

their own behavior is unwittingly hurting the other person, then there may be a greater chance for change (Holtzworth-Munroe & Jacobson, 1987).

Although misattributions have often been observed by researchers and discussed by therapists, there has been little empirical research on whether they can be used to promote positive communication. All we know is that successful conflict resolution is associated with access to the other person's perceptions on the issues (Knudson, Sommers & Golding, 1980; Long & Andrews, 1990), and with a "constructive engagement" orientation towards dealing with conflict issues (Sayers, Baucom, Sher, Weiss & Hayman, 1991).

When attempting to help couples resolve conflict therapists have been forced to devise techniques that are simple and quick, since marital therapy tends to be brief, with the majority of cases lasting less than 20 sessions. However, marital interventions have been designed without sufficient attention to etiological or conceptual considerations (Markman & Floyd, 1980). Techniques are usually based on common sense and clinical experience rather than on empirical data, and there is a need to evaluate and improve their

effectiveness (Schaap & Jansen-Nawas, 1987).

One frequently used technique is to have distressed couples discuss a high-conflict issue and then give them some form of feedback about their interactions. The purpose of providing feedback is to improve communication, which is known to be a key factor in relationship adjustment. Distressed couples are either deficient in the communication skills needed to resolve their interpersonal conflicts (Markman & Floyd, 1980), or they have the skills but do not use them in interactions with their spouses. Furthermore, the negative affect that is experienced during conflicts is a significant predictor of long term marital dissatisfaction (Levenson & Gottman, 1985). Indeed, research by Markman (1978) indicated that unrewarding interactions precede the development of relationship dissatisfaction.

The nature of the feedback that is given by therapists to distressed couples about their interactions varies widely. Sometimes verbal feedback alone is given, sometimes couples view a video replay of their interaction; and sometimes video replay is combined with verbal feedback. Edelson and Seidman

(1975) found that videotape plus verbal feedback had the greatest effect on changing married couples' perceptions of each other. The study found no difference between verbal feedback and no-feedback conditions. Fichten (1984) found that videotape feedback alone had no effect on distressed spouses' perceptions of themselves or their partners, or on the attributions regarding the causes of behavior.

The Present Study

The present study examined the effectiveness of one particular kind of feedback--feedback that is based on the supposed cause of the escalating conflict that leads to discontent. More specifically, the study examined whether providing feedback regarding attributional discrepancies and unproductive blaming reduces the negativity and escalation that occurs when distressed couples discuss high-conflict issues. The provision of attributional feedback could be considered a form of "insight-oriented" marital therapy, which has been found to be superior to simple behavioral modification approaches (Snyder, Wills & Grady-Fletcher, 1991).

Feedback that is given to distressed couples on

just one occasion is not likely to have a significant impact on global marital satisfaction. If the feedback is to effect a significant long-term change it will probably have to be repeated on a number of occasions over the course of therapy. Research on the effectiveness of marital therapy usually examines change across 4 to 16 treatment sessions (e.g. Baucom, 1982; Emmelkamp, van Linden van den Heuvell, Ruphan, Sanderman, Scholing & Stroink, 1988; Epstein & Jackson, 1978; Hahlweg, Revenstorf & Schindler, 1982; Hahlweg, Revenstorf & Schindler, 1984; Jacobson, 1984; Johnson & Greenberg, 1985; Margolin & Weiss, 1978; and Padgett, 1983). The present study examined the impact of repeated feedback over three sessions. Video/attributional feedback by itself is not a "therapy" but rather just one technique that could be part of a treatment program. It's nevertheless important to evaluate its effectiveness.

In the present study distressed couples first discussed high-conflict issues while being videotaped. They then separately reviewed the tapes, identifying and providing attributions for their own and their spouse's negative behavior. They then received feedback

on their attributional discrepancies. It was predicted that attributional feedback should assist couples in reducing their negative behaviors while discussing issues of disagreement, from the first to the final session. The specific hypotheses were:

(1) couples should display more positive, and less negative, nonverbal behavior in the final discussion, as measured by the nonverbal codes of the Marital Interaction Coding System (MICS: Weiss & Summers, 1983);

(2) couples should display more positive, and less negative, verbal behavior in the final discussion, as measured by the coding system developed by Sillars (Zietlow & Sillars, 1988);

(3) there should be less negative reciprocity and more positive reciprocity in the final discussion relative to the first;

(4) the couples should report more positive feelings and perceptions across sessions.

Method

Subjects and Setting

Ten couples participated in the study. The couples were initially screened by telephone. Three

couples were obtained through local publicity asking for couples' participation in a study on marital interaction, and were paid $45 for their participation. These couples were mailed out the Dyadic Adjustment Scale (Spanier, 1976), the list of Problem Areas in Marriage (Geiss & O'Leary, 1981), the Consent Form and the Mailout Letter (see Appendices B, C, D and E). The remaining seven couples were recruited from Introductory Psychology classes and received token percentage points toward their course for their participation. These couples also completed the Dyadic Adjustment Scale and the list of Problem Areas in Marriage. (Studies that looked at employing various marital therapies to improve spousal relationships have used from 4 to 18 couples per treatment condition; Baucom, 1982; Baucom & Lester, 1986; Emmelkamp, van Linden van den Heuvell, Ruphan, Sanderman, Scholing & Stroink, 1988; Epstein & Jackson, 1978; Hahlweg, Revenstorf & Schindler, 1982; Hahlweg, Revenstorf & Schindler, 1984; Jacobson, 1978; Jacobson, 1979; Jacobson, 1984; Johnson & Greenberg, 1985; Margolin & Weiss, 1978; Padgett, 1983; and Wampler & Sprenkle, 1980).

Subjects were informed that the research was being conducted through Lakehead University and that the purpose of their participation was to further scientific knowledge, and not to receive therapeutic intervention. They were told about the videotaping of their discussions before participating, and were asked to sign a consent form (see Appendix D). They were assured that their contributions would remain completely anonymous and confidential; that their names were not required on the questionnaire; that they were free to withdraw at any time; and that they may inquire about the results of the study once it was completed.

They were also screened to ensure that they had been married or living together for at least two years, had completed high school, and were not presently in counselling (as in Epstein & Jackson, 1978). These criteria were used to insure homogeneity in the sample. Of the ten couples, eight were classified as distressed on the basis of the couple's score on the Dyadic Adjustment Scale (DAS; Spanier, 1976) (see Appendix B). According to Camper, Jacobson, Holtzworth-Munroe and Schmaling (1988), distressed couples are those whose combined DAS score is less than 200. The mean

individual score for husbands and wives was 92.95 (SD = 7.96). All but two of the couples had a combined score of less than 200. (For the two couples that exceeded 200 both scored 202, and were therefore also considered sufficiently "distressed" for inclusion in the study). The mean number of years married or living together was 8.35 (SD = .15) and the mean number of children was 1.05 (SD = 1.05). The average age was 31.1 years.

The research setting was a small house on campus with living room furnishings, video facilities, and a small interview room.

Procedure

The ten distressed couples were videotaped three times over one month, while they discussed areas of disagreement for 15 minutes (Gottman, 1979, varied video time intervals from several hours to a few minutes, and found 15 minutes to be adequate). One video camera, visible to the couples, was positioned approximately eight feet in front of the couple. During the 15 minute discussion the couple sat facing each other. They were not required to look into the camera. A microphone was attached to the camera. Before beginning their discussions the subjects were

told to visualize themselves in the place where they generally talk things over. They were encouraged to discuss the topics in a manner as similar as possible to the way in which they discuss topics at home (Resick, Barr, Sweet, Kieffer, Ruby & Spiegel, 1981). The discussion topics were selected with the aid of Geiss and O'Leary's (1981) list of Problem Areas in Marriage, and by asking each spouse to rate the severity of these problem areas (see Appendix C). For each session couples agreed to discuss one area selected as being a problem area in their relationship. If they finished discussing this issue and time still remained, they were instructed to continue their discussion on another problem area. This technique has frequently been used in past research (Camper, Jacobson, Holtzworth-Munroe & Schmaling, 1988; Gottman, Markman & Notarius, 1977; Gottman & Krokoff, 1984; Margolin & Wampold, 1981; Ting-Toomey, 1983).

Immediately after the discussion each individual viewed the videotape alone and was asked to: (1) identify statements or exchanges in which they felt criticized or hurt by the other person; (2) make attributions about why the other person said what

he/she did; (3) describe his/her own response to the hurtful comments of the other; and (4) make attributions about why he/she responded in that particular way (see Appendix F).

After this task the couple was brought together to review their behavior identifications and attributions. Each partner then: (1) described each exchange that was identified as significant/hurtful; (2) told the other person how his/her behavior was perceived; (3) described the impact it had on his/her spouse; and (4) described why the spouse reacted to feeling hurt or criticized. According to past research, the spouses' reaction to feeling criticized is likely to be a behavior that was identified by the other person as criticizing or hurting them, in which case spouses were informed of how their partner perceived and experienced their reaction. The feedback that was given by the experimenter was therefore based on the data provided by the individuals themselves, with the experimenter pointing out how each party is equally innocent and unwittingly guilty; how each person is being hurt and in turn hurting the other; and how this can escalate the conflict into personal attacks, preventing them

from resolving the issue at hand. If the couples' discussions did not escalate into conflict and unproductive blaming, the experimenter merely pointed out that discussions can turn to conflict, and when they do each partner is equally innocent and guilty, and that blaming prevents resolving the issue at hand.

To ensure that couples left the testing session in a positive frame, the experimenter pointed out that the aim of this technique was not to further point blame, but to assist each other in taking some responsibility for the conflict, and that each person plays a role in turning the discussion into conflict. If the couples seemed to resist this technique and became defensive when faced with the feedback, the experimenter reminded them that this was merely a technique being tested, and that it might not necessarily be the one that worked for their relationship.

The couples were videotaped twice more over the month following the above outlined procedure. After each discussion, couples completed a post discussion measure of how they felt during the discussion; the extent to which they felt understood, criticized, and hurt by the other; and how successfully they thought

they had resolved the conflict issues (see Appendix G).

At the end of the study couples filled out a form indicating whether or not they felt the attributional feedback assisted them in reducing their negative behaviors from the first to the final discussion (see Appendix H). They also stated whether or not they had practised the attribution feedback technique when discussions arose at home, and whether or not they felt they would use this technique in the future. Couples were also debriefed at the end of the study (see Appendix I).

Although demand characteristics may appear to be a potential problem, previous research has found that distressed couples cannot control the behaviors they exhibit. For example Vincent, Friedman, Nugent and Messerly (1979) asked distressed and nondistressed couples to either "fake good" or "fake bad" while discussing conflict issues. They found that for nonverbal behaviors, couples were limited in their ability to comply with the experimenter's request. This suggests that demand characteristics may not be a serious contaminant in marital research.

Measures

Marital Distress. The Dyadic Adjustment Scale (DAS: Spanier, 1976) (see Appendix B) is a 32 item self-report inventory that is frequently used as a global measure of marital satisfaction, with higher scores indicating greater adjustment. It is a revised version of the widely used Marital Adjustment Scale (MAS: Locke & Wallace, 1959), and correlates highly with this scale (Spanier, 1976). The DAS has been found to reliably differentiate distressed from nondistressed couples (Jacobson, Elwood & Dallas, 1981). There is also strong evidence for the internal consistency, criterion-related validity, and construct validity of this scale (Spanier, 1976).

Attribution. The attribution questions were those used by Camper, Jacobson, Holtzworth-Munroe, and Schmaling (1988) (see Appendix F). For each behavior identified, subjects were asked to provide a brief written response to the following question: "What was the cause of your spouse's behavior; Why did he/she do this?". Similarly, after describing their reaction to their spouse, they were asked: "What was the cause of your behavior; Why did you do this?". This information

was used to give feedback to the couples.

Coding of the Videotapes. All of the videotaped discussions were transcribed, and seven nonverbal behaviors were coded with the Marital Interaction Scoring System (MICS: Weiss & Summers, 1983). The MICS is the most widely used and frequently evaluated marital observation system (Markman & Notarius, 1987; Weiss & Margolin, 1986). It was developed to describe verbal and nonverbal interactions between marital partners in a laboratory or clinical settings as they attempt to resolve conflict issues. The MICS contains 32 behavior codes that can be combined into a smaller number of summary scores (e.g., Verbal Positive, Verbal Negative, Nonverbal Positive, Nonverbal Negative, Blame, Problem-Solving). It provides comprehensive coverage of communication and problem-solving in marital interaction and is suitable for sequential analyses. Furthermore, in the MICS, behaviors are recorded as they appear in 30-second "time-lines", whereas in the present study the behaviors were recorded whenever they occurred. See Appendix A, Table A-1 for a summary of the nonverbal behaviors used.

The transcripts were also coded according to

procedures developed by Zietlow and Sillars (1988) for verbal communication during conflict discussions. The codes are divided into 7 subgroups: denial and equivocation, topic management, noncommittal remarks, irreverent remarks, analytic remarks, confrontive remarks, and conciliatory remarks. See Appendix A, Table A-2 for a summary of the verbal behaviors used.

Results

Behavior Coding

Two coders trained together to attain at least 70% agreement on approximately 10% of the interactions for both the verbal and nonverbal behavior codes. The unit of analysis was the speaking turn. If more than one category of behavior occurred throughout the speaking turn, each behavior was recorded.

The primary coder coded all 30 videotaped interactions for both verbal and nonverbal exchanges. Fifteen percent of the nonverbal interactions were randomly checked for intercoder reliability. The intraclass correlations (Shrout & Fleiss, 1979, formula 1,1) ranged from .68 to .93 with all but DA (Dysphoric Affect) above the standard criterion of .75 (see Table 1). The average intraclass correlation was .83.

Fifteen percent of the verbal interactions were also checked for intercoder reliability. Cohen's (1968) Kappa statistic (a conservative measure) revealed that intercoder agreements ranged from .23 to .99. The average was .93 (see Table 2). Twenty-four of the 26 codes were above .70. The intraclass correlation (Shrout & Fleiss, 1979 formula 1,1) indicated that intercoder agreements ranged from .44 to .99, with all but three codes, TS (topic shift) CR (personal criticism) and ID (implicit denial), above the standard criterion of .75. The average was .83.

Data Analysis Strategy

The data were analyzed with individuals as the unit of analysis because of the small sample size, the large number of variables, and the desire to use multivariate statistics. Further analyses were conducted whenever significant effects emerged: tests for dependency within dyads were performed, followed by a re-analysis of the data for a given variable with the couple as the unit of analysis. The findings for these supplementary analyses are reported at the end of the Results section.

Nonverbal Behaviors

A repeated measures multivariate analysis of variance (MANOVA) was performed to explore whether subjects displayed more positive and less negative nonverbal behavior across the discussions, and there were no significant multivariate time effects nor univariate time effects (see Table 3).

Verbal Behaviors

To explore whether subjects displayed more positive and less negative verbal behaviors across sessions, a multivariate analysis of variance (MANOVA) was performed on each of the seven categories of verbal behavior from Sillars' coding scheme. The results are presented in Tables 4-9. A main effect was found only for Conciliatory Remarks (see Table 9). Within this category, the univariate analyses indicated a significant effect for Acceptance of Responsibility. Between-session contrasts indicated a significant increase in Acceptance of Responsibility from session 1 to session 2, $F(1,19) = 4.17$, $p<.05$, and a significant increase from session 1 to session 3, $F(1,19) = 11.49$, $p<.01$.

In addition to these base-rate analyses the verbal

behaviors were analyzes a second time using proportioned scores for each behavior. Specifically, the number of times an individual displayed a given behavior in a session was divided by the total number of behaviors displayed by the subject in a session. The effects for Conciliatory Remarks and Acceptance of Responsibility remained significant. However, there was also a significant effect for Concessions (a form of Conciliatory Remarks) which paralleled the effects for Acceptance of Responsibility. Only the base rate results are reported in this thesis, because proportioned-score results have not been reported in previous research.

Sequential Analyses

The sequential analyses were conducted according to the recommendations of Bakeman and Gottman (1986), and were modelled on the procedures used by Margolin and Wampold (1981). First, the behavioral codes were collapsed into four categories: (1) positive behaviors (irreverent remarks, conciliatory remarks); (2) negative behaviors (confrontive remarks); (3) avoidant behaviors (denial and equivocation, topic management); and (4) neutral behaviors (noncommittal remarks,

analytic remarks). The data were then transformed into 4 x 4 transitional frequency matrices for each session and each lag. The codes were grouped into 4 categories (as in Zietlow & Sillars, 1988) rather than 7, as 7 x 7 transitional frequency matrices would have been too large. Also, the interest was primarily in the results of the positive and negative reciprocity. The transitional frequency matrices indicate how often positive, negative, avoidant, and neutral behaviors by one individual were displayed in response to positive, negative, avoidant, and neutral behaviors by their partner. The following example illustrates how the data were collected for the different lags:

H (Pos) W (Neg) W (Avoid) H (Neg) W (Pos)

With Behavior 1 as the stimulus, the response is W(Neg) at lag 1, W(Avoid) at lag 2, and W(Pos) at lag 4. "Response" behaviors that were displayed by the same person who performed the "Stimulus" behaviors (e.g., the fourth behavior in the above example) were not counted in this study. The number of stimulus-response sequences were counted for each behavior and for each lag. The resulting transitional frequency

matrices were then converted to transitional probability matrices. Of particular interest in the present study were changes in the transitional probabilities for negative reciprocity (the extent to which negative behaviors by one spouse were followed by negative behaviors by the other spouse), and positive reciprocity (the extent to which positive behaviors by one spouse were followed by positive behaviors by the other spouse) across the three sessions. The statistical significance of the transitional probabilities was evaluated by the use of Sackett z scores, which are relatively conservative (Bakeman & Gottman, 1986). In this procedure z scores greater than 1.96 are considered significant at the .05 level.

Aggregate analyses. The first sequential analyses were conducted on the aggregate matrices (the data from all couples combined). The transitional probability matrices for the first three lags are presented in Tables 10, 11, and 12, and the corresponding Sackett scores for positive and negative reciprocity are presented in Table 13. It was predicted that the couples would display increasing degrees of positive reciprocity across sessions, and a significant degree

of positive reciprocity was displayed on Session 3 (for lags 1 and 3). Positive reciprocity was not displayed at above-chance levels on Sessions 1 or 2. The findings for negative reciprocity were somewhat weaker. It was predicted that the couples would display decreasing degrees of negative reciprocity across sessions. But the couples displayed negative reciprocity only on Session 2 (and only for lag 1), and not on Sessions 1 or 3 Negative reciprocity thus increased from Sessions 1 to 2, and decreased from Sessions 2 to 3

Individual Couple Sequential Analyses. A second set of sequential analyses was conducted on the data from individual couples for the purpose of testing for significant changes across sessions. Sackett z scores were computed for positive and negative reciprocity for each couple, at each separate lag, and on each session. One-way repeated measures ANOVAs revealed no significant overall Fs for positive or negative reciprocity (see the means in Table 14). None of the paired session contrasts reached significance either.

Post-Discussion Perceptions

It was predicted that the couples would report

more positive post-discussion feelings and perceptions across sessions. After each session the couples had been asked to rate how bad, criticized, hurt, sad and angry they felt during the discussion. They also rated how successful they thought they were in resolving the conflict issue, all on six point scales.

Internal consistency analyses revealed that these six ratings formed a reliable scale for all three sessions (alpha=.81 for session 1; alpha=.82 for session 2; and alpha=.88 for session 3). The analyses were therefore performed on the means of the six ratings, a scale labelled "Discussion Success". As predicted, there was a significant effect across sessions, F (2,38) 3.13, p = .055. Session contrasts revealed that subjects reported greater Discussion Success in session 2 (M = 3.75) than in session 1 (M = ?.13), F (1,19) 5.26, p = .03, and that subjects reported greater Discussion Success in session 3 (M = 3.7) than in session 1, F (1,19) 4.53, p = .05.

Supplementary Analyses

When the data were analyzed by individual, significant effects emerged for two variables: Discussion Success and Acceptance of Responsibility.

These variables were therefore tested for within-dyad dependency by computing husband-wife Pearson correlations for each session. For Acceptance of Responsibility the correlations were -.27, p = .45 for Session 1; .58, p = .08 for Session 2; and .21, p = .56 for Session 3. For Discussion Success the husband-wife correlations were .25, p = .49 for Session 1; .04, p = .92 for Session 2; and .62, p = .06 for Session 3. Thus, for each variable there was significant interdependence on only one session.

The data for the two variables were therefore re-analyzed with the couple as the unit of analysis in order to confirm the observed individual-level effects. As reported in Table 15, there was a significant overall effect for Acceptance of Responsibility, and between-session contrasts revealed that couples accepted more responsibility in Session 2 than in Session 1, F (1,9) = 5.06, p = .05, and in Session 3 than in Session 1, F (1,9) = 10.76, p = .01. The overall effect for Discussion Success did not quite reach significance (p = .09, see Table 15), and between-session contrasts revealed only tendencies for subjects to report more Discussion Success in Session 2

than in Session 1, F (1,9) = 4.66, p = .06, and in Session 3 than in Session 1, F (1,9) = 3.68, p = .09. In sum, the couple-level analyses confirmed the significant effects for Acceptance of Responsibility, and provided only quasi-significant confirmation of the effects for Discussion Success across sessions.

Discussion

This study examined whether providing feedback about attributional discrepancies and access to one's partner's point of view reduces the negativity and escalation that occurs when distressed couples discuss high-conflict issues. Many analyses were conducted and a handful of significant effects emerged, providing only mild support for the hypotheses.

First, there was no support for the hypothesis that couples would display more positive, and less negative nonverbal behavior across sessions. Second, some support was found for the hypothesis that couples would display more positive verbal behavior in the later discussions relative to the first. Specifically, individuals were able to accept more responsibility for the conflict in the second session than the first, and in the third session than the first. Third, some

support was found for the hypothesis that there would be less negative reciprocity and more positive reciprocity across sessions. A significant degree of positive reciprocity was displayed on the final session (for lags 1 and 3), but not in the first two sessions. Only in the third session did couples respond with more positive behavior after having received positive behaviors from their partners. Negative reciprocity increased from session 1 to 2, but then decreased from session 2 to 3 (for lag 1). This pattern is perplexing. Perhaps couples were somewhat tentative or restrained during the first session; displayed more typical conversational behavior in the second session; and began responding to the feedback manipulation on the third session.

Fourth, the findings of this study supported the hypothesis that couples would feel more successful in resolving the final conflict issue than they were in resolving the first. In particular, couples reported feeling that they were more successful in resolving session 2 than 1, and session 3 than session 1

Fifth, in the past, even though little or no positive effects have been found using video feedback

for couples discussing conflict issues, subjects have sometime reported insights by watching their videotapes (Fichten, 1984). For this study, in informal post-session conversations with the couples 50% reported that the feedback assisted them in reducing their negative behaviors from the first to the final discussion. Also, over half of the couples claimed to have practised the technique at home. As well, 90% of the sample stated that they would use attribution feedback when discussing issues of disagreement in the future.

Previous studies on marital communication have repeatedly found evidence for a relationship between marital distress and difficulties in communication (Schaap, 1984; Weiss 1978; Sillars & Weisberg, 1987). Typically, distressed couples begin their conversations quite normally, but soon their interaction patterns dissolve and the communication becomes much more dysfunctional. Distress couples have been noted as being unable to use effective communication behavior, and usually once negative behaviors are exhibited in conflict discussions, negative behaviors are more likely to be exhibited. Perhaps some of the

significant effects noted in this study can be attributed to the video and attributional feedback that the couples received.

In the present research, both video replays and attributional feedback were used and only weak effects emerged. In a study in which various types of feedback techniques were compared, the best results were found when video feedback was combined with verbal feedback (Edelson & Seidman, 1975). Taken together, the studies to date seem to indicate that this simple and appealing technique in marital therapy tends to have only modest benefits, and that both video and verbal feedback are required. Perhaps future studies could focus on what subjects learn whey they receive these forms of feedback. Knowledge of what is being learned may help explain the modest effects.

In sum, the findings of this study were much weaker than expected at the outset. It seems that attributional discrepancies and negative escalation are much easier to observe among distressed couples than they are to change. As is often the case, psychological problems and their solutions are more obvious and simple to observers than they are to the

sufferers. In the present study it may have been unrealistic to expect substantial changes in a short period of time. Perhaps the mild benefits that were observed indicate promise for feedback techniques over the longer term.

The attributional feedback provided in this study could be considered a form of "insight-oriented" marital therapy (O'Leary & Smith, 1991; Snyder, Wills & Grady-Fletcher, 1991). Couples had the opportunity to gain insight into their attributional discrepancies, and into how these discrepancies contribute to escalating conflicts. However, insight by itself may not be sufficient to produce substantial changes. A recent trend in therapies for marital distress involves combining cognitive or "insight-oriented" techniques with traditional behavior modification training (Baucom, Sayers & Sher, 1990; Beach & Bauserman, 1990; Jacobson, 1991; O'Leary & Smith, 1991). Perhaps a similar approach could be used for video and attributional feedback.

Limitations of the Present Research

The specific methodological and procedural limitations of this study deserve consideration.

First, although this study looked at a distressed population, two of the couples did not meet the formal cut-off score for being "distressed". Second, as mentioned previously, there was no control group with which to compare the changes in the sample. (At the onset of the research it was hoped that controls would be used, but there was too much difficulty in finding even these ten couples.) Third, another consideration is the depth and difficulty of coding seven and a half hours of transcribed videotaped conversations, using two fairly detailed and complex coding systems. This was evident in the low reliability scores for some of the behaviors. Fourth, three of the variables were positively skewed: AS (assent), NS (noncommittal statements), and DEN (denial). This may also have contributed to the non-significant effects. Fifth, the small sample size certainly reduced the probability of finding significant results. Sixth, the results obtained by a study of this type are limited in their application to naturalistic couple discussions, due to the unnatural laboratory conditions. These include the use of: time limits, imposed instructions and observational equipment (Margolin & Wampold, 1981).

Finally, demand characteristics may have contributed to some of the significant findings. Couples may have accepted more responsibility and reported more discussion success across sessions merely because they thought this was expected of them. It is perhaps less likely that demand characteristics were responsible for the degree of positive and negative reciprocity that were observed due to the less "fakeable" nature of these phenomena. However, the potential role of demand characteristics cannot be ruled out, and the findings should be interpreted with caution.

Future research could also focus on gender differences in martial communication in response.to video and attributional feedback. Gender differences have been observed in recent research on marital interactions (eg., Christensen & Heavey, 1990; Haefner, Notarius & Pellegrini, 1991; Sayers & Baucom, 1991), but they were not examined closely or reported in the present study because of the small sample size and large number of variables.

In the present study only general attributions of responsibility were examined, and perhaps more specific

attributions and cognitions could be targeted in further research. For example, it may prove useful to tease apart attributions of cause, responsibility and blame, and to examine individual differences in attributional styles (Baucom, Epstein, Sayers & Sher, 1989; Bradbury & Fincham, 1990).

Conclusion

This study was an attempt to determine whether videotape and attributional feedback would assist distressed couples in decreasing their negative behaviors during conflict discussions. The limitations of the study indicate that the present findings should be considered "tentative" and "suggestive." A further study is required using a larger sample size, a comparison group, and testing over an extended period of time. Further investigation is needed to determine whether there is indeed merit for the use of video and attributional feedback as part of clinical treatment programs for distressed couples.

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Appendix A

Table A-1

Summary of the Nonverbal Behaviors

Codes	Illustrations
State Code	
NT - Not-Tracking Nt is coded for the listener's failure to maintain eye contact for more than 3 seconds.	
Nonverbal Carrier Codes	
AS - Assent AS is coded for a brief listener response that acknowledges that the speaker's comments are being listened to.	1. "Yeah..." 2. "Mmm..."
DA - Dysphoric Affect 1. Self-complaints 2. Dysphoric (Sad) Affect 3. Whining	"I never get to sleep in on the weekend" (whining voice tone).
PP - Positive Physical Contact PP is coded for each occasion in which one person touches the other in a friendly or affectionate manner.	Husband hugs wife.
SL - Smile/Laugh SL is coded for each separate occurrence of a laugh or a smile.	

TO - Turn-Off TO is a nonverbal response which communicates hostility, disgust, or disagreement, and is in reaction to something the other partner said.	Husband grimaces and rolls his eyes upward.
WI - Withdrawal WI is coded for behaviors that imply pulling back from the interaction, walling off the other partner, or not listening to the speaker.	

Table A-2

Summary of the Verbal Behaviors

Codes	Illustrations
Denial & Equivocation	
DEN - Direct Denial DEN is coded for statements that deny that a conflict is present.	"Do you think that's a problem?" "No."
ID - Implicit Denial ID is coded for statements that imply denial by providing a rational for a denial statement.	"We've never had enough money to disagree over." (In response to a question about disagreements over money)
EV - Evasive Remarks EV is coded for statements that fail to recognize the presence of conflict.	"I don't know".
Topic Management	
TS - Topic shifts TS is coded for statements that end discussion of a conflict before each person has voiced an opinion.	abrupt discontinuities
TA - Topic avoidance TA is coded for statements that end discussion of a conflict issue before it has been fully discussed.	"I don't want to talk about that."
Noncommittal Remarks	
NS - Noncommittal statements NS is coded for statements statements that neither affirm nor deny the	"The kids are growing up so fast I can't believe it."

presence of conflict.

NQ - Noncommittal questions
NQ is coded for questions that are: unfocused, rephrased questions from the researcher or seeking conflict-irrelevant information.

"What do you think?"

AB - Abstract remarks
AB is coded for abstract principles or generalization comments.

"All people are irritable sometimes."

PC - Procedural remarks
PC is coded for statements that supplant discussion of conflict.

"Are we talking loud enough?"

Irreverent Remarks

JO - Joking
JO is coded whenever there is friendly joking or laughter (not at the expense of the partner).

Analytic Remarks

DES - Descriptive statements
DES is coded for nonevaluative statements regarding observable events related to the conflict.

"I criticized you yesterday for getting angry at the kids."

DI - Disclosive statements
DI is coded for nonevaluative statements regarding events related to the conflict, but not observable to the partner.

"I swear I never had such a bad week as that week."

QU - Qualifying statements
QU is coded for statements that qualify the nature and extent of conflict.

"Well there was just that one instance..."

SD - Soliciting disclosure SD is coded for nonhostile questions about nonobservable events related to the conflict.	"Well, I feel there might be a problem there."
SC - Soliciting criticism SC is coded for nonhostile questions soliciting criticism of oneself.	"Does it bother you when I stay up late?"
Confrontive Remarks	
CR - Personal criticism CR is coded for statements that criticize the characteristics or behaviors of the partner.	"Sometimes you leave and you won't say goodbye or nothing. You just walk right out."
RE - Rejection RE is coded for statements in response to the partner's previous statement that imply personal antagonism toward the partner and disagreement.	1. "Bullshit." 2. "Oh come on."
HI - Hostile imperatives HI is coded for requests, demands, arguments, threats, or other statements that indirectly blame the partner.	"If you would just pay the phone bill everything would be okay."
HJ - Hostile jokes HJ is coded for joking, teasing, or sarcasm at the expense of the partner.	"Should we tell everyone about what rags you use to clean?"
HQ - Hostile questions HQ is coded for directive questions that fault the partner.	"Who does most of the cleaning around here?"
PR - Presumptive remarks PR is the opposite of	"I think you are purposely making yourself

"soliciting disclosure".

miserable."

DR - Denial of responsibility
DR is coded for statements that deny responsibility for conflict.

"That's not my fault."

Conciliatory Remarks

SU - Supportive remarks
SU is coded for statements that refer to understanding, support, acceptance or strengths of the relationship.

"I can't see why you would be upset."

CN - Concessions
CN is coded for statements that express a willingness to consider mutually acceptable solutions to conflicts.

"I think I could work on that more."

AR - Acceptance of responsibility
AR is coded for statements that attribute responsibility for conflict to self or to both partners.

"That's my fault."

UC - Uncodable
UC is coded for statements or questions that did not classify under one of the above codes.

Appendix B

Dyadic Adjustment Scale

Most persons have disagreements in their relationships. For each of the items below please indicate the approximate extent of agreement or disagreement between you and your partner by circling the appropriate answer.

1) Handling family finances.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

2) Matters of recreation.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

3) Religious matters.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

4) Demonstrations of affection.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

5) Friends.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

6) Sex relations.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

7) Conventionality (correct or proper behavior).

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

8) Philosophy of life.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

9) Ways of dealing with parents or in-laws.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

10) Aims, goals, and things believed important.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

11) Amount of time we want to spend together.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

12) Making major decisions.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

13) Household tasks.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

14) Leisure time interests and activities.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

15) Career decisions.

always disagree	almost always disagree	frequently disagree	occasionally disagree	almost always agree	always agree

16) How often do you discuss or have you considered divorce, separation, or terminating your relationship?

all the time	most of the time	more often than not	occasionally	rarely	never

17) How often do you or your spouse leave the house after a fight?

all the time	most of the time	more often than not	occasionally	rarely	never

18) In general, how often do you think that things between you and your spouse are going well?

all the time	most of the time	more often than not	occasionally	rarely	never

19) Do you confide in your spouse?

all the time	most of the time	more often than not	occasionally	rarely	never

20) Do you ever regret that you married?

all the time	most of the time	more often than not	occasionally	rarely	never

21) How often do you and your spouse quarrel?

all the time	most of the time	more often than not	occasionally	rarely	never

22) How often do you and your mate "get on each other's nerves?"

all the time	most of the time	more often than not	occasionally	rarely	never

23) How often do you kiss your spouse? (check one of the following)

every day	almost every day	occasionally	rarely	never

24) Do you and your spouse engage in outside interests together? (check one of the following)

all of them	most of them	some of them	very few of them	none of them

25) We have a stimulating exchange of ideas.

never	less than once a month	once or twice a month	once or twice a week	once a day	more often

26) We laugh together.

never	less than once a month	once or twice a month	once or twice a week	once a day.	more often

27) We calmly discuss something.

never	less than once a month	once or twice a month	once or twice a week	once a day	more often

28) We work together on a project.

never	less than once a month	once or twice a month	once or twice a week	once a day	more often

These are some things about which couples sometimes agree and sometimes disagree. Indicate if either item below caused differences of opinions or were problems in your relationship during the past few weeks. (Circle yes or no)

29) Being too tired for sex. yes no

30) Not showing love. yes no

31) All things considered, how happy are you in your relationship?

extremely unhappy	fairly unhappy	a little unhappy	happy	very happy	extremely happy	perfect

32) Which of the following statements best describes how you feel about the future of your relationship. (check one)

__I want desperately for my relationship to succeed and would go to almost any length to see that it does.

__I want very much for my relationship to succeed, and will do all I can to see that it does.

__I want very much for my relationship to succeed, and will do my fair share to see that it does.

__It would be nice if my relationship succeeded, but I can't do much more than I am doing now to help it succeed.

__It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.

__My relationship can never succeed, and there is no more that I can do to keep the relationship going.

Appendix C

Problem Areas in Marriage

Please indicate the degree to which the following issues are problems in your present relationship. Circle the most appropriate number for each issue according to the following scale.

Not a Problem					A Big Problem
Demonstrations of affection	2	3	4	5	6
Lack of loving feelings	2	3	4	5	6
Power struggles	2	3	4	5	6
Decision making/problem solving	2	3	4	5	6
Money management/finances	2	3	4	5	6
Value conflicts	2	3	4	5	6
Role conflicts	2	3	4	5	6
Children	2	3	4	5	6
Individual problems	2	3	4	5	6
Household management	2	3	4	5	6
In-laws/relatives	2	3	4	5	6
Jealousy	2	3	4	5	6
Employment	2	3	4	5	6
Recreation/leisure activities	2	3	4	5	6
Communicating with each other	2	3	4	5	6
Unrealistic expectations of marriage or spouse	2	3	4	5	6
Problems related to previous marriage	2	3	4	5	6

Not a Problem 1 5 6	A Big Problem
Friends	2 3 4 5
Addictive behavior	3 4 5
Personal habits/appearance	3 4 5
Religious differences	3 4 5
Health problems/physical handicap	3 4 5
Other (specify)	4 5

Appendix D

Consent Form

Please indicate below the way (ways) in which we may use the videotape made in this study. The experimenter will explain in detail what each may consist of. Both your videotape and your questionnaire responses will be identified only by number. The sheet that connects your name with this number will be kept separately in a secure place.

__ analysis by Dr. O'Connor, Debbie Bennie and other assistants

_ viewing by other participants (people like yourself) in order to obtain their impressions of behavior tendencies

_ viewing by a student audience in a classroom

_ all of the above

_ none of the above: Please erase the tape

My signature below indicates that my participation in this study was voluntary and I was assured at the outset that I was free to withdraw at any time. The purpose of the study ("A Test of the Effectiveness of Attributional Feedback In Reducing Negative Behavior in Distressed Marital Couples", conducted by Debbie Bennie and Brian O'Connor of Lakehead University) was explained to me to my satisfaction. I understand that the study

is concerned with the factors associated with marital conflict and how it can be reduced, and that the purpose of my participation was to further scientific knowledge. I have been assured that there are no risks to me involved in this study; that my contributions will remain completely anonymous and confidential; and that I may inquire about the results of the study once it is completed.

Name: _____

Signature: _____

Date: _____

Appendix E

Mailout Letter

Dear

Thank you for agreeing to participate in this study. Enclosed you will find two copies of the questionnaire that I spoke to you about during our telephone conversation. Would you and your spouse please complete the questionnaires independently of each other, as quickly as possible. When they have both been completed place them in the return envelope and put them in the mail box. When I receive them I will contact you to set up a time for the next part of the study. Please do not hesitate to call me about any questions you may have.

Thank you,

Debbie Bennie
Department of Psychology
Lakehead University
955 Oliver Road
Thunder Bay, Ontario
P7B 5E1

Appendix F

Behavioral Perceptions and Attributions

For each behavior that you identified from the videotape, please give a brief written response to the following questions:

1) What was the cause of your spouse's behavior; Why did he/she do this?

2) Please give a brief description of your reaction to your spouse.

3) What was the cause of your behavior; Why did you do this?

Appendix G

Post-Discussion Questions

Please rate how you felt during the discussion:

Good				Bad
Criticized	4	5	6	Not Criticized
Hurt	4	5	6	Not Hurt
Happy				Sad
Happy				Angry

Please rate how successful you were in resolving the conflict issue:

Very Successful Very Unsuccessful

Appendix H

Subjective Comments

The technique that you have been practising is called 'attribution feedback'.

Do you feel that attribution feedback helped reduce your negative behavior when discussing issues of disagreement, from the first to the final videotaping? Why or why not?

How often were you able to practice this technique at home?

Will you use it in the future?

Other comments.

Appendix I

Debriefing and Assessment of Knowledge

Let me tell you more about the study. The purpose of the study is to examine how attribution feedback is related to negative communication behavior. You filled out the Dyadic Adjustment Scale to measure the level of distress in your relationship. We think that distressed couples begin conflict discussions normally but soon escalate into negative exchanges. They tend to attribute the conflict to the negative personality traits of their partner, and view their own negative actions as justified reactions to their partner's behavior. As a result, the original issue of conflict usually becomes lost.

Now I need to ask you some questions in order to assess your knowledge of the nature of the study.

1) Which of the following scales were you administered?

a) the Dyadic Adjustment Scale
b) the Minnesota Personality Inventory
c) the Dyadic Attribution Inventory

) The purpose of the study was to examine the relation between _____.

a) attribution feedback and stress
b) loneliness and ego development
c) attribution feedback and negative communication behavior

If you would like to find out more about the study and the findings, then contact Dr. Brian O'Connor at 343-8110.

Table 1

Interobserver reliabilities for the nonverbal behaviors

Variable	Intraclass Correlation
Overall	.83
Not Tracking	.93
Assent	.92
Dysphoric Affect	.68
Positive Physical Contact	.77
Smile/Laugh	.93
Turn-Off	.81
Withdrawal	.77

Table 2

Interobserver reliabilities for the verbal behaviors

Variable	Cohen's Kappa	Intraclass Correlation
Overall	.93	.83
Denial	.98	.75
Implicit Denial	.93	.71
Evasive Remarks	.98	.75
Topic Shift	.67	.44
Topic Avoidance	.99	.99
Noncommittal Remarks	.99	.99
Noncommittal Questions	.98	.75
Abstract Remarks	.99	.90
Procedural Remarks	.87	.50
Joking	.99	.75
Descriptive Statements	.94	.83
Disclosive Statements	.99	.95
Qualifying Statements	.99	.94
Soliciting Disclosure	.99	.93
Soliciting Criticism	.99	.99
Personal Criticism	.23	.99
Rejection	.98	.99
Hostile Imperatives	.92	.99
Hostile Jokes	.99	.93
Hostile Questions	.99	.93
Presumptive Remarks	.99	.86
Denial of Responsibility	.99	.97
Supportive Remarks	.97	.89
Concessions	.99	.99
Acceptance of Responsibility	.92	.90
Uncodable	.99	.99

Table 3

Means and standard deviations for the nonverbal behaviors

Behavior		Time 1	Time 2	Time 3	F
Overall F (14,64) = 1.2, p=0.29, Wilks					
Not Tracking	M	4.60	4.25	4.75	0.14
	SD	5.0	5.5	4.5	
Assent	M	10.05	11.65	10.90	0.73
	SD	6.8	9.7	6.9	
Dysphoric Affect	M	1.45	2.55	4.35	3.79
	SD	2.5	4.1	5.3	
Positive Physical Contact	M	0.60	0.15	0.90	2.48
	SD	2.0	0.5	2.0	
Smile/Laugh	M	19.95	14.85	14.90	2.23
	SD	10.9	9.8	10.7	
Turnoff	M	5.00	5.25	4.15	0.32
	SD	4.5	6.4	5.0	
Withdrawal	M	3.05	2.60	3.05	0.16
	SD	3.8	2.9	4.1	

Table 4

Means and standard deviations for Denial and Equivocation

Behavior		Time 1	Time 2	Time 3	F
Denial	M	1.40	2.00	1.20	0.54
	SD	1.9	5.2	1.6	
Implicit Denial	M	0.65	0.30	0.40	1.12
	SD	1.2	0.5	0.9	
Evasive Remarks	M	1.35	1.50	2.50	2.24
	SD	1.8	2.5	3.1	

Overall F (6,72) = 1.17, p=0.330, Wilks

Table 5

Means and standard deviations for Topic Management

Behavior		Time 1	Time 2	Time 3	F
Topic Shift	M	0.50	0.30	0.25	0.74
	SD	0.8	0.6	0.8	
Topic Avoidance	M	0.15	0.00	0.10	1.00
	SD	0.5	0.0	0.3	

Overall F(4,74) = 0.80, p=0.527, Wilks

Table 6

Means and standard deviations for Noncommittal Remarks and Irreverent Remarks

Behavior		Time 1	Time 2	Time 3	F
Noncommittal Remarks					
Noncommittal Remarks	M	0.20	0.20	0.15	0.06
	SD	0.7	0.52	0.37	
Noncommittal Questions	M	1.75	1.80	1.30	0.84
	SD	2.0	1.9	1.9	
Abstract Remarks	M	2.70	3.20	1.60	1.35
	SD	3.7	4.3	3.0	
Procedural Remarks	M	1.30	0.80	1.25	1.28
	SD	1.4	0.8	1.5	
Overall F(8,70) = 1.10, p=0.374, Wilks					
Irreverent Remarks					
Joking	M	0.30	0.00	1.25	2.36
	SD	0.7	0.0	3.2	
Overall F(2,38) = 2.36, p=0.108					

Table 7

Means and standard deviations for Analytic Remarks

Behavior		Time 1	Time 2	Time 3	F
Descriptive Statements	M	2.55	2.75	2.10	0.230
	SD	3.6	4.0	1.8	
Disclosive Statements	M	7.30	9.70	8.35	0.798
	SD	4.1	10.1	5.4	
Qualifying Statements	M	17.15	15.20	13.90	2.86
	SD	8.3	6.7	8.2	
Soliciting Disclosure	M	4.35	4.40	5.35	0.444
	SD	4.2	5.0	4.1	
Soliciting Criticism	M	0.00	0.45	0.00	1.000
	SD	0.0	2.0	0.0	

Overall $F(10,68) = 0.97$, $p=0.474$, Wilks

Table 8

Means and standard deviations for Confrontive Remarks

Behavior		Time 1	Time 2	Time 3	F
Personal Criticism	M	0.60	1.60	0.60	2.222
	SD	1.6	2.7	1.2	
Rejection	M	2.20	1.75	1.30	1.060
	SD	2.4	2.8	1.3	
Hostile Imperatives	M	3.95	2.15	3.00	1.480
	SD	4.1	4.8	3.9	
Hostile Jokes	M	2.55	2.90	3.15	0.160
	SD	2.4	4.2	4.2	
Hostile Questions	M	4.95	3.65	3.10	1.293
	SD	5.9	3.6	2.8	
Presumptive Remarks	M	6.60	6.35	6.70	0.047
	SD	4.3	4.2	4.6	
Denial of Responsibility	M	0.30	0.35	0.25	0.110
	SD	0.6	1.0	0.7	

Overall $F(14,64) = 1.27$, $p=0.253$, Wilks

Table 9

Means and standard deviations for Conciliatory Remarks

Behavior		Time 1	Time 2	Time 3	F
Supportive Remarks	M	2.15	1.35	2.65	1.36
	SD	1.9	2.0	3.3	
Concessions	M	0.90	0.45	1.40	1.93
	SD	1.4	0.7	2.4	
Acceptance of Responsibility	M	0.25	0.55	0.95	5.72*
	SD	0.4	0.7	1.1	
Overall $F(6,72) = 2.89$, $p=0.014$, Wilks					

* $p<.01$

Table 10

Lag 1: Transitional Probabilities

	Response Behavior					
Session 1						
	Pos	Neg	Avoid	Neu	Row Total	Uncondit Probability
	.06	.43	.06	.46	54	.06
	.05	.32	.10	.53	311	.32
A	.09	.33	.06	.52	64	.07
Neu	.06	.26	.08	.60	537	.56
					966	
Session 2						
P	.06	.24	.06	.64	33	.11
N	.01	.36	.12	.51	297	.31
A	.06	.40	.04	.51	51	.05
Neu	.04	.24	.06	.67	565	.60
					946	
Session 3						
P	.47	.41	.07	.52	59	.06
	.11	.25	.11	.53	255	.28
A	.09	.41	.05	.45	58	.06
Neu	.07	.23	.07	.63	543	.59
					915	

Table 11

Lag 2: Transitional Probabilities

	Response Behavior					
Session 1	Pos	Neg	Avoid	Neu	Row Total	Uncondit Probability
	.05	.24	.10	.62	21	.04
	.11	.35	.10	.44	114	.22
--	.03	.21	.09	.67	33	.06
Neu	.05	.33	.08	.54	175	.34
					518	
Session 2						
P	.07	.21	.07	.64	14	.05
	.03	.35	.05	.57	86	.32
A	.05	.53	.00	.42	19	.07
Neu	.06	.29	.05	.60	150	.56
					269	
Session 3						
P	.09	.19	.13	.60	32	.12
	.07	.34	.08	.51	74	.27
--	.10	.30	.10	.50	20	.07
Neu	.11	.32	.05	.52	148	.54
					274	

Table 12

Lag 3: Transitional Probabilities

	Response Behavior					
Session 1						
	Pos	Neg	Avoid	Neu	Row Total	Uncondit Probability
	.07	.38	.00	.55	42	.05
	.06	.29	.08	.57	246	.32
..	.08	.30	.16	.46	50	.06
Neu	.05	.30	.07	.58	434/772	.56
Sessions 2						
P	.07	.30	.00	.63	30	.04
	.03	.31	.10	.56	234	.30
..	.00	.47	.05	.47	55	.07
Neu	.04	.25	.06	.64	463/782	.59
Session 3						
P	.24	.29	.07	.40	75	.09
	.09	.29	.08	.54	214	.27
	.07	.35	.11	.47	55	.07
Neu	.08	.24	.06	.61	442/786	.56

Table 13

Sackett z-scores for the aggregate analyses

Lag 1	Session 1	Session 2	Session 3
+ve Reciproc	-0.11	0.85	6.54*
-ve Reciproc	1.03	2.77*	0.03
Lag 2			
+ve Reciproc	-0.36	0.33	-0.09
-ve Reciproc	0.76	0.50	0.58
Lag 3			
+ve Reciproc	0.40	0.91	4.08*
-ve Reciproc	-0.45	0.72	0.70

* indicates $p<.05$

Table 14

Sackett z-scores--Individual couple sequential analyses

Lag 1	Session 1	Session 2	Session 3	F*
+ve Reciproc	-0.08	0.17	1.04	1.33
-ve Reciproc	0.09	0.31	-0.30	1.70
Lag 2				
+ve reciproc	-1.50	-0.11	-0.30	1.40
-ve reciproc	0.11	-0.05	-0.18	0.40
Lag 3				
+ve reciproc	0.04	0.01	0.60	2.30
-ve reciproc	-0.39	-0.53	0.01	1.20

*df=2,8

Table 15

Results for when the Couple was the Unit of Analysis

		Time 1	Time 2	Time 3	F	p
Acceptance of Responsibility	M	.35	.55	.95	6.28	.009
	SD	.26	.60	.83		
Discussion Success		3.22	3.75	3.70	2.82	
		.88	1.1	1.2		