Response to Strategy and Communication in an Arms Race-Disarmament Dilemma

BRIAN BETZ
Kent State University

Subjects (40 males and 40 females) played against a simulated other in a six-choice prisoner's dilemma game that was described in terms of an arms race. The simulated other employed either a GRIT or tit-for-tat strategy, with either communication or no communication. The GRIT strategy elicited more cooperation than the tit-for-tat strategy, and there was an interaction such that the GRIT strategy with communication produced more cooperation than any of the other conditions. In addition, explicit communication decreased the occurrence of deception being employed against the GRIT strategist. Although GRIT produced more conciliation than tit-for-tat, the simulated other using GRIT was also taken advantage of more frequently; to avoid exploitation, modifications in the GRIT strategy may be needed. The results are discussed in terms of how explicit communication is needed for GRIT to be optimally effective and how additional communication may reduce exploitation.

A number of studies (e.g., Lindskold, Betz, and Walters 1986; Lindskold and Finch 1981; Lindskold and Han 1988) have shown that a modified version of Osgood's (1962) GRIT proposal is effective at eliciting cooperation from subjects during mixed-motive conflict. GRIT is an acronym for graduated reciprocated initiatives in tension reduction and was designed to end the arms race between the United States and Soviet Union. The GRIT

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proposal entails making a general announcement of cooperation followed by a series of precisely announced conciliatory actions.

Most of the studies investigating the effectiveness of GRIT have been performed using the standard two-choice prisoner's dilemma (PD) game. For example, it has been found that in the standard two-choice PD game, GRIT (a) elicits cooperation from groups as well as individuals (Lindskold and Collins 1978); (b) elicits cooperation in sequential interaction, where subjects choose after a simulated other and thus can take advantage of their opponent (Lindskold 1979); and (c) elicits cooperation from competitively motivated subjects as well as cooperatively motivated subjects (Lindskold, Walters, and Koutsourais 1983). Of particular interest to the present study is the fact that GRIT has been proven to be more effective at eliciting cooperation than other strategies including tit-for-tat (Lindskold, Walters, and Koutsourais 1983). Even with the addition of communication to the tit-for-tat strategy, GRIT prompts more cooperation than tit-for-tat (Han and Lindskold 1985).

The GRIT proposal has also been tested in a modified version of the standard two-choice PD game in which subjects have six choices (Pilisuk 1984; Pilisuk and Skolnick 1968). Pilisuk, Potter, Rapoport, and Winter (1965) maintain that there are three main advantages to the expanded PD game. First, on a given trial, subjects have a range of moves so that they are not restricted to either totally cooperative or totally competitive behavior. Thus, the expanded game resembles real world situations in which individuals have a number of choices in a given situation. Second, arms-race-simulation conditions can be added easily to the expanded game. Third, because a wide range of moves is possible, the expanded game allows for a more precise analysis of what actions are conducive to building trust.

When GRIT is compared to tit-for-tat in the six-choice PD game, it does not fair as well as it does in the two-choice PD game. For example, Pilisuk and Skolnick (1968) performed an experiment in which subjects played a six-choice PD game that was couched in terms of an arms race. In this study, subjects were given the option of converting five missiles into factories over the course of five moves. On each move subjects could convert one, two, or none of their missiles into factories or back again. Each trial ended on move five when payoff occurred and points were calculated. The experiment was a 3 (type of opponent) × 2 (inspection vs. no inspection) design in which a subject's opponent was either another subject, a simulated other employing a tit-for-tat strategy, or a simulated other employing a GRIT strategy. The inspection manipulation consisted of each player being shown his or her

opponent's missiles on the third move of each trial. Inspection allows players to subtly communicate with one another by displaying the number of missiles each has prior to the end of the trial. It was found that tit-for-tat and GRIT produced more cooperation than the natural pairs condition, but they did not differ from one another. Further, a predicted interaction between strategy and inspection only approached significance. GRIT with inspection did not produce significantly more cooperation than any of the other conditions.

Pilisuk (1984) also performed an experiment employing the use of a six-choice PD game in which GRIT with inspection was compared to tit-for-tat with inspection. Consistent with the Pilisuk and Skolnick's (1968) findings, no significant difference in the levels of cooperation was found between these two strategies.

The findings of the Pilisuk and Skolnick (1968) study and the Pilisuk (1984) study could be interpreted to mean that in more complex social interactions, such as the six-choice PD game, GRIT may be no better at eliciting cooperation than tit-for-tat; only during relatively simple social interactions (i.e. the two-choice PD game) is GRIT more effective than tit-for-tat. Therefore, it is possible that during real world conflict, tit-for-tat may be just as effective as GRIT.

On the other hand, it can be argued that the failure to find a difference between GRIT and tit-for-tat in the six-choice PD game resulted because explicit communication during the six-choice PD game was not employed. Because a verbal statement is not made, the use of inspection may not clearly signal a player's intentions. Osgood (1962) clearly stressed the need for the communication of both good intention and a basic outline of events to follow for GRIT to be effective. In two-choice PD games in which GRIT is compared to tit-for-tat, the GRIT strategy always includes a written opening announcement and the use of trial-by-trial messages. Although Lindskold, Han, and Betz (1986a) found the opening announcement to be more important than the trial-by-trial messages, possibly both are needed in the six-choice PD game. Due to the more complicated nature of the six-choice game, it seems reasonable to conclude that unambiguous communication would be all the more important. An attempt was made in the present study to compare the effectiveness of GRIT to tit-for-tat in a six-choice PD game in which communication was manipulated. It was predicted that GRIT with communication would be more effective at eliciting cooperation from subjects than GRIT without communication, tit-for-tat with communication or tit-for-tat without communication.

METHOD

SUBJECTS

A total of 40 males and 40 females was recruited from an introductory social science pool. Subjects were assigned to the cells of a 2 (communication/no communication) × 2 (strategy of simulated other) experimental design until a total of 10 males and 10 females were in each cell.

APPARATUS

The experiment was conducted in two adjacent rooms. One room served as an experimental control room and the other was the subject's room. Because subjects believed that they were interacting with another subject, it was made to appear that a third room was being used as the other subject's room.

The subject was seated at a table that held a six-choice PD panel. The payoff matrix on the PD panel is shown in Figure 1. Although there are six choices in the expanded PD game, the basic mixed-motive structure of the game is the same as the traditional two-choice PD game. On any one trial a subject will earn more points by possessing a greater number of missiles, regardless of how many missiles his or her opponent has. Nevertheless, if both players stay fully armed, neither player will make any points, and disarmament is advantageous exactly to the degree that it is mutual.

The PD panel also contained pushbuttons that allowed the subject to select how many missiles/factories he or she wished to possess. Signal lights on the panel indicated when inspection would occur and when the subject could select how many missiles/factories he or she wished to possess. Signal lights also indicated how many missiles/factories a subject's opponent, that is, the simulated other, possessed. In the communication condition, signal lights also indicated when communication was allowed and if the simulated other had sent one of three possible messages. The messages posted on the subject's panel read: "I'll be keeping the same number factories/missiles at payoff time," "I'll be changing my factories into missiles at payoff time," and "I wish to write a note." When the simulated other chose the last message, the experimenter went from the experimenter's room to the room that was made to appear to be the subject's opponent's room, and then to the subject's room to deliver the note. The subject could not communicate with the simulated other; only the simulated other could send messages and notes.

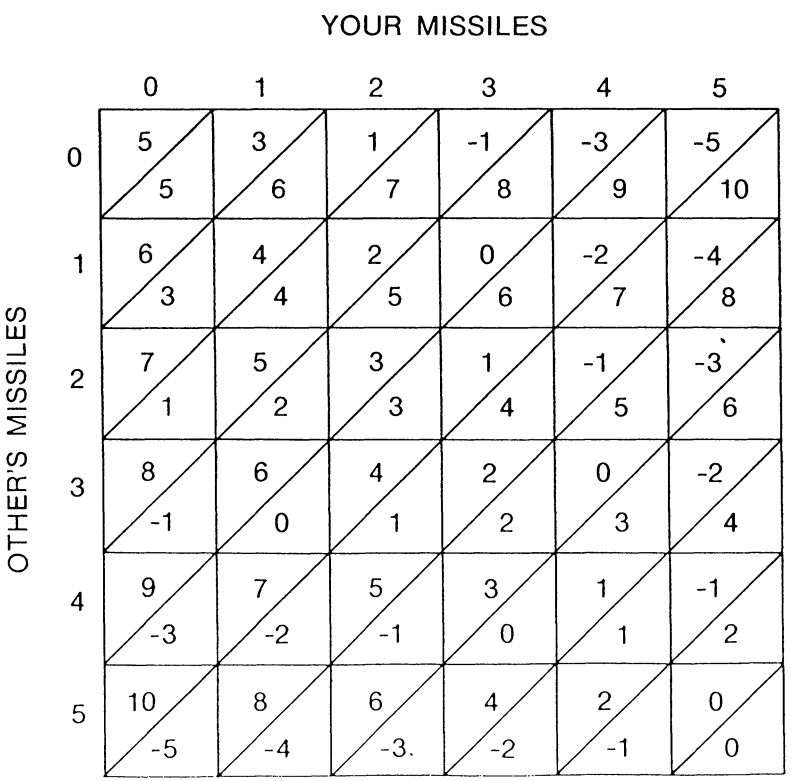

Figure 1: Payoff Matrix for the Six-Choice Prisoner's Dilemma Game
NOTE: Numbers above the diagonal are the payoffs for the simulated other. Numbers below the diagonal are the payoffs for the subject.

In the no-communication conditions, messages were not posted.

PROCEDURE

Subject sign-up sheets provided two spaces for each time period, but a dummy name was written in one of these spaces so that subjects would believe they were interacting with a same-sex peer.

On arrival, subjects were seated in front of the PD panel and given written instructions. After leaving the subject alone for a short time to read the instructions the experimenter returned and gave oral instructions.

In all conditions the six-choice PD game lasted 25 trials. Similar to Pilisuk and Skolnick's (1968) study, subjects had five moves on each trial and, at the beginning of each trial, subjects were fully armed with five missiles. On each move a subject could convert one, two, or none of his or her missiles into factories or factories into missiles. On the third move of each trial, inspection occurred and each player was shown how many missiles his or her opponent had. Each trial ended on move five when payoff occurred and points were calculated by comparing how many missiles a player had in relations to his or her opponent.

The first five trials consisted of a "warm-up" period in which the simulated other stayed armed at five missiles for two trials and armed at four missiles for three trials. During trials 6 through 25 the simulated other employed either a GRIT or a tit-for-tat strategy. The GRIT strategist began trial six with three missiles and disarmed one missile per trial unless the subject displayed one more missile than the simulated other at payoff time. If exploited, the simulated other added one missile on the next trial but continued to disarm on the subsequent trial. The tit-for-tat strategist began trial six with whatever number of missiles the subject had displayed at payoff time on trial five, and on subsequent trials continued to match the level of armament the subject had displayed at payoff time on each preceding trial. On each trial both strategists showed the exact number of missiles at inspection time as were displayed at payoff time.

In the GRIT condition with communication, before inspection on trial six, the simulated other sent the handwritten note, "I'll be changing my missiles into factories. It's what we have to do to get our most points." In the tit-for-tat condition with communication, before inspection on trial six, the simulated other sent the handwritten note, "I'll do what you do. If you turn your missiles into factories I will, too, or if you turn your factories into missiles I will, too." In both communication conditions, after each inspection during trials 6 to 25 the simulated other sent the message, "I'll be keeping the same number of factories/missiles at payoff time."

After the PD game subjects filled out a postexperimental questionnaire on which they rated the simulated other on semantic differential ratings. Subjects rated the other on dimensions of credible-noncredible, predictable-unpredictable, trustworthy-untrustworthy, and cooperative-uncooperative as well as on evaluation, potency, and activity. Subjects were also asked to rate the simulated other on how clearly he or she communicated his or her strategy as well as how consistent, risky, unusual, and manipulative the simulated other's strategy was.

RESULTS

PRIMARY DEPENDENT VARIABLES

The primary dependent variables in the present study were the average number of missiles at payoff time, the average number of discrepant outcomes, and the average number of deceptive inspections. The average number of missiles at payoff time was used as an index of cooperation; the fewer the number of missiles indicated the greater the degree of cooperation. A discrepant outcome results when one player has benefited at another player's expense (Pilisuk et al. 1965). In the present study, a discrepant outcome was defined as the subject having one or more missiles than the simulated other at payoff time. A deceptive inspection was defined as the subject having shown fewer missiles at inspection than were displayed at payoff time. Showing fewer missiles at inspection than at payoff time can be seen as a subject's attempt to deceive an opponent concerning how much disarmament will occur at the end of the trial (Pilisuk 1984). These dependent measures were averaged across trials 6 to 25, after the five-trial "warm-up" period, when the various experimental manipulations were in operation.

A 2 (strategy of simulated other) × 2 (communication/no communication) × 2 (sex of subject) multivariate analysis of variance (MANOVA) was performed on the average number of missiles at payoff time, the average number of discrepant outcomes, and the average number of deceptive inspections. A significant main effect for strategy was found $F(3, 70) = 59.70, p < .001$. Univariate analyses revealed significant main effects ($df = 1, 72$) of strategy on the average number of missiles at payoff time, $F = 7.72, p < .01$, and the average number of discrepant outcomes, $F = 69.07, p < .001$. It was found that subjects who played against a GRIT strategist had significantly fewer missiles ($M = 3.14$) than subjects who played against a tit-for-tat strategist ($M = 3.89$). Nevertheless, this main effect for strategy is qualified by and must be interpreted in the context of a significant interaction that is reported and discussed below. It was also found that the GRIT strategy produces more discrepant outcomes ($M = 12.22$) than the tit-for-tat strategy ($M = 4.77$). Subjects were fairly exploitative of the GRIT strategy in that when a discrepant outcome did occur, the average number of missiles by which the subject out numbered the GRIT strategist was 1.82. Thus, although the GRIT strategy produced more disarmament, the GRIT strategy was also taken advantage of more frequently than the tit-for-tat strategy.[1]

1. Because the simulated other simply matches what the subject did on the previous trial, the tit-for-tat strategy should, almost by definition, have fewer discrepant outcomes than GRIT.

The MANOVA revealed an interaction between strategy and communication, $F(3, 70) = 5.88$, $p < .01$. Univariate analyses ($df = 1, 72$) showed significant interactions on the average number of missiles at payoff time, $F = 14.48$, $p < .001$, and the average number of deceptive inspections, $F = 6.32$, $p < .01$. Cicchetti's posttest on the average number of missiles at payoff time revealed that, as predicted, subjects in the GRIT/communication condition ($M = 2.52$) had significantly fewer missiles than subjects in the GRIT/no communication ($M = 3.75$), tit-for-tat/communication ($M = 4.31$), or tit-for-tat no communication ($M = 3.47$) conditions, which did not differ from one another.

Note that the significant main effect for strategy appears to be due to the significant interaction between strategy and communication and specifically due to the low number of missiles in the GRIT communication condition.

Concerning the interaction between communication and strategy on the number of deceptive inspections, Cicchetti's posttest showed that the GRIT/communication condition had fewer deceptive inspections ($M = 7.30$) than the GRIT/no communication condition ($M = 11.20$). No other significant differences were found. The mean number of deceptive inspections was 10.95 for the tit-for-tat/communication condition and 9.05 for the tit-for-tat/no communication condition. During debriefing, many subjects in the GRIT/no communication condition stated that they used the deceptive inspections to keep the number of their opponent's missiles low and then took advantage of their opponent at payoff time. Thus, these subjects thought that their deceptive behavior was responsible for the low numbers of missiles shown by their opponent. The low number of deceptive inspections in the GRIT/communication condition underscores the importance of employing explicit communication with the GRIT strategy.

A DESCRIPTIVE MEASURE OF COOPERATION

A common way to measure cooperation in the expanded PD game is to categorize pairs of players depending on their tendency to polarize to either total cooperation (i.e., Doves) or total competition (i.e., Hawks). A pair of players is labeled Dove if both players have four or more factories for each of the last five trials of the PD game and if both players have no less than 22 factories over the last five trials of the PD game. A pair of players is labeled Hawk if both players have four or more missiles for each of the last five trials of the PD game and if both players have 22 or more missiles for the last five

Nevertheless, the average number of discrepant outcomes was included as a dependent variable because it provides an index of the degree to which a strategy is exploited.

trials of the PD game. A pair of players is labeled Mugwump if they fail to meet the criteria for Doves or Hawks (Pilisuk 1984).

This classification scheme was designed to assess the behavior of a pair of subjects. The appropriateness of applying it to games in which a simulated player is employed is somewhat questionable. No longer is the behavior of a pair of subjects being measured, but instead the behavior of a single subject. Nevertheless, this classification scheme has been applied to PD games in which subjects played against a simulated other (Pilisuk and Skolnick 1968).

In the present study the above mentioned classification scheme was used with one modification. It will be recalled that the GRIT strategist began trial six with three missiles and disarmed one missile per trial unless the subject displayed one more missile than the simulated other at payoff time. If exploited, the simulated other added one missile on the next trial but continued to disarm on the subsequent trial. One result of following this strategy was that during any block of five trials the GRIT strategist never stayed armed at 4 or more missiles for more than three trials or possessed more than 18 missiles. Thus it would be impossible for a subject playing against a GRIT strategist to be categorized as a Hawk. As a result, the criteria for Hawk in the GRIT condition were relaxed. A pair would be labeled Hawk if the GRIT strategist stayed armed at 4 missiles for three trials and possessed 18 missiles during the last five trials of the PD game and the subject had met the standard criteria for the Hawk category. This was deemed appropriate because the Hawk category is one in which both subjects are polarized toward competition; the GRIT strategist was in fact as competitive as the strategy allowed.[2] In addition, although the Hawk criteria are not exactly the same as were used in previous research, the classification of subjects into various categories does provide useful information concerning a subject's behavior during the last stages of the PD game.[3]

Table 1 shows that only the GRIT strategy with communication produced a large percentage of Doves. Nevertheless, with 50% of the pairs falling into the Mugwump category, the GRIT strategy—or at least the one used in the present study—could be improved on. It should also be noted that the tit-for-tat with communication produced a high percentage of Hawks.

A possible explanation for this might be that because the subject did not take the initiative to de-escalate the conflict after receiving the tit-for-tat note, the tit-for-tat strategist continued to compete. Perhaps the honest announce-

2. For consistency, the classification scheme could have been modified for tit-for-tat in the same manner it was modified for GRIT. This would result in only one subject in the tit-for-tat/no communication condition being classified as a Hawk instead of a Mugwump.

3. Even Pilisuk and Skolnick (1968) admit to the arbitrary nature of their classification scheme.

TABLE 1
Percentage of Players in Dove, Hawk, and Mugwump Categories

Condition	Category		
	Dove	*Hawk*	*Mugwump*
GRIT/communication	35	15	50
GRIT/no communication	10	35	55
Tit-for-tat/communication	0	65	35
Tit-for-tat/no communication	5	15	80

ment of competition with trial-by-trial messages tended to exacerbate the conflict.

POSTEXPERIMENTAL RATINGS

A 2 (strategy of simulated other) × 2 (communication/no communication) × 2 (sex of subject) MANOVA of the postexperimental ratings revealed a significant main effect for communication, $F(12, 61) = 2.10$, $p < .05$. Univariate analyses showed that the other employing communication was seen as more credible ($M = 5.20$) than the other not employing communication ($M = 4.65$), $F(1, 72) = 4.04$, $p < .05$. It was also found that the other employing communication was seen as more manipulative ($M = 1.90$) than the other who did not employ communication ($M = 1.47$), $F(1, 72) = 7.28$, $p < .01$.

It is reasonable to assume that an opponent who sends messages stating what his or her behavior will be would be perceived as more credible than an opponent who does not send messages. Although the other employing communication was seen as more manipulative than the other who did not employ communication, the average rating—1.90—was only in the *somewhat manipulative* range on the *not manipulative at all* (1) to *extremely manipulative* (5) scale. Thus, sending a note and messages did not lead subjects to see their opponent as attempting to place extreme pressure on them.

DISCUSSION

The results of the present study indicate that when following the GRIT strategy, optimal effectiveness is achieved by including a general announcement of intention followed by communicated conciliatory actions. Pilisuk's

(1984) finding, that GRIT was no better than tit-for-tat at eliciting cooperation from subjects, is most likely a result of not including explicit communication in the GRIT strategy. In the present study, GRIT and tit-for-tat did not differ when there was no communication; nevertheless, GRIT was superior to tit-for-tat in terms of influencing subjects to cooperate when communication was employed. Further, the finding that a high percentage of subjects in the tit-for-tat/communication condition were categorized as Hawks points to the fact that communication may even make the tit-for-tat strategy less effective.

If, given communication, tit-for-tat is still less effective than GRIT, what element of GRIT can account for its successfulness? As Han (1984) has noted, responsiveness to an opponent, the use of communication, and the expression of mutual interest are all important components of GRIT. Nevertheless, it is the willingness to take the initiative in behaving cooperatively that is the primary distinguishing feature of the GRIT strategy. Although tit-for-tat has been shown to be successful at eliciting cooperation from an adversary (Axelrod 1980, 1984), its inferiority, when compared with GRIT, is due to the lack of initiative in the tit-for-tat strategy. With tit-for-tat it is possible for two sides to get locked in on mutual competition. The GRIT strategist, even after exploitation, eventually returns to conciliation.

The finding that the GRIT/communication condition had a lower number of deceptive inspections than the GRIT/no communication condition shows that GRIT with communication may influence an opponent to use communication opportunities in an honest manner. This has important ramifications for resolving conflict in that open and credible communication during disputes has been recognized as necessary for parties to reach mutually satisfactory solutions (Thompson 1991; Walton and McKersie 1965).

Even though GRIT was successful at eliciting cooperation from subjects, it was not without some exploitation. On the average, the GRIT strategist was exploited on over half of the trials. In addition, when exploitation did occur, subjects outnumbered the simulated other by an average of almost two missiles. In defense of the GRIT strategy, it could be that the retaliatory aspect of GRIT may have been too weak in the present study. Osgood (1962) advised that exploitation should be met with equal retaliation; Lindskold, Bennett, and Wayner (1976) found that equal retaliation was more conducive to promoting conciliation than insufficient retaliation. In the present study, the GRIT strategist retaliated exploitation by adding only one missile on the next trial even when exploitation had occurred in excess of the one missile. So, for example, when the GRIT strategist was armed at zero missiles, it was possible for the subject to outnumber him or her by five missiles, and on the

next trial the GRIT strategist would add only one missile, returning to zero missiles on the following trial.

Setting aside the issue of equal retaliation, one could still ask how the GRIT strategy might be improved on. One suggestion is that GRIT be combined with tit-for-tat (Pilisuk and Skolnick 1968; Patchen 1987). A GRIT strategy would be applied first to induce movement toward conciliation and then tit-for-tat would be employed to produce full cooperation. In fact, there is some evidence that conciliatory gestures followed by tit-for-tat responses are successful in resolving international disputes (Leng and Wheeler 1979). Nevertheless, one disadvantage to this approach is that it would be possible for a conflict to escalate with only one exploitative gesture.

Another suggestion might be to repeat and rephrase the general statement of intention. Employing a two-choice PD game, Lindskold, Han, and Betz (1986b) compared GRIT with repetition and rephrasing to a standard GRIT strategy. It was found that the former condition produced more cooperation than the latter condition. In addition, subjects in the rephrasing and repetition condition felt that it was less appropriate to gain more points than the other person than subjects in the standard GRIT condition. It is possible that additional communication may be needed to reduce exploitation of a GRIT strategist.

It may be concluded that explicit communication is a necessary component of the GRIT strategy. Explicit communication increases the likelihood of conciliation and also decreases the likelihood of deception. It will be the task of future research to determine whether the relatively high rate of exploitation that occurred against the GRIT strategy is a trade off for the avoidance of escalation, or if modification of the GRIT strategy (at least as GRIT was operationalized in the present study) may lessen the degree to which the GRIT strategist is exploited. Even taking into account the problem of exploitation, GRIT still appears to be the most effective strategy to use during conflict.

REFERENCES

Axelrod, R. 1980. Effective choice in the prisoner's dilemma. *Journal of Conflict Resolution* 24:3-25.

———. 1984. *The evolution of cooperation.* New York: Basic Books.

Han, G. 1984. Responsiveness and conciliation. Unpublished manuscript, Ohio University, Athens.

Han, G., and S. Lindskold. 1985. *Responsiveness and conciliation in conflict.* Paper presented at the annual meeting of the Midwestern Psychological Association, Chicago.

Leng, R. J., and G. H. Wheeler. 1979. Influence strategies, success, and war. *Journal of Conflict Resolution* 23:655-84.

Lindskold, S. 1979. Conciliation with simultaneous or sequential interaction. *Journal of Conflict Resolution* 23:704-17.

Lindskold, S., R. Bennett, and M. Wayner. 1976. Retaliation level as a foundation for subsequent conciliation. *Behavioral Science* 21:13-18.

Lindskold, S., B. Betz, and P. Walters. 1986. Transforming competitive or cooperative climates. *Journal of Conflict Resolution* 30:99-114.

Lindskold, S., and M. G. Collins. 1978. Inducing cooperation by groups and individuals: Applying Osgood's GRIT strategy. *Journal of Conflict Resolution* 22:679-90.

Lindskold, S., and M. L. Finch. 1981. Styles of announcing conciliation. *Journal of Conflict Resolution* 25:145-55.

Lindskold, S., and G. Han. 1988. GRIT as a foundation for integrative bargaining. *Personality and Social Psychology Bulletin* 14:335-45.

Lindskold, S., G. Han, and B. Betz. 1986a. The essential elements of communication in the GRIT strategy. *Personality and Social Psychology Bulletin* 12:179-86.

———. 1986b. Repeated persuasion in interpersonal conflict. *Journal of Personality and Social Psychology* 51:1183-88.

Lindskold, S., P. Walters, and H. Koutsourais. 1983. Cooperators, competitors, and response to GRIT. *Journal of Conflict Resolution* 27:521-32.

Osgood, C. E. 1962. *An alternative to war or surrender*. Urbana: University of Illinois Press.

Patchen, M. 1987. Strategies for eliciting cooperation from an adversary: Laboratory and international findings. *Journal of Conflict Resolution* 31:164-85.

Pilisuk, M. 1984. Experimenting with the arms race. *Journal of Conflict Resolution* 28:296-315.

Pilisuk, M., P. Potter, A. Rapoport, and J. A. Winter. 1965. War hawks and peace doves: Alternate resolutions of experimental conflicts. *Journal of Conflict Resolution* 9:491-508.

Pilisuk, M., and P. Skolnick. 1968. Inducing trust: A test of the Osgood proposal. *Journal of Personality and Social Psychology* 8:121-33.

Thompson, L. 1991. Information exchange in negotiation. *Journal of Experimental Social Psychology* 27:161-79.

Walton, R. E., and R. B. McKersie. 1965. *A behavioral theory of labor relations*. New York: McGraw-Hill.