The Effects of Multiple Mediation Techniques on Negotiation.

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The most frequently used mediator techniques in complex negotiations, suggestion of agreement points and reward of concessions, have received some investigation. To further assess the effects of these two techniques, 80 college students participated in simulated union management negotiations. Students were randomly assigned to represent union or management in four negotiations including suggestions of agreement points to the negotiator, suggestions of agreement points to the opponent, and mediator rewards to the negotiator's concessions. After the fourth negotiation, students completed brief questionnaires. Data analyses showed main effects upon the final offer, the total profits, and the number of agreements for the suggestion to the negotiator and the opponent. Mediators' rewards to the negotiator did not affect total concessions, number of agreements, or joint profits. Suggestions applied to the negotiator and the opponent interacted in an interfering rather than in a complementary manner. Whether or not the simultaneous application of mediator techniques to the negotiator and opponent interacts in a facilitative or interfering way depends upon which techniques produce indirect effects on the opposite negotiator. Facilitative and interfering effects frequently are likely to cancel each other. (JAC)
THE EFFECTS OF MULTIPLE MEDIATION
TECHNIQUES ON NEGOTIATION

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Abstract

The influence of utilizing multiple mediation techniques was investigated in simulated union management negotiations. The mediator techniques employed in the study were mediator rewards of the negotiator's concessions, suggestions of agreement points to the negotiator, and suggestions of agreement points to the opponent. These factors were investigated in a $2 \times 2 \times 2$ design. It was hypothesized that similar techniques applied to one negotiation would interfere with each other while two similar techniques applied to the negotiator and the opponent would compliment each other. The subjects were 80 undergraduates enrolled in introductory psychology. They were randomly assigned to represent the union or the management in a series of four wage negotiations. There were main effects of suggestions to the negotiator and to the opponent upon the final offers, the total profits, and the number of agreements. There was limited support provided for the predicted interaction between the mediator rewards and suggestions to the negotiator. The suggestions applied to the negotiator and the opponent interacted in an interfering rather than in the predicted complimentary fashion. It was suggested that indirect influences of the mediator's techniques may have been responsible for the latter interaction.
The Effects of Multiple Mediation Techniques on Negotiation

Complex negotiations frequently require the use of mediation to help the parties converge on an acceptable solution. Mediators have developed and utilized a wide variety of techniques for this purpose. Knowledge concerning the efficacy of these techniques is largely based on descriptions of cases involving their use; there has been relatively little empirical research on them. Two of the most frequently used mediator techniques, suggestion of agreement points (Pruitt and Johnson, 1970, Wall, 1982) and rewards of concessions (Wall, 1979), have received some experimental investigation. This paper further investigates the relationship of these techniques as they are applied to the negotiator and the opponent.

A mediated negotiation involves at least three different interacting relationships: mediator-negotiator, mediator-opponent, and negotiator-opponent (Figure 1). The relationships between these parties have been characterized as ones of exchange (Wall, 1981b). Each party obtains rewards and costs in their interactions with the other parties. The parties' outcomes for the negotiation are derived by the difference between the sum of the rewards and costs obtained from all of their relationships.

The negotiators' behaviors are determined by their level of aspiration, their outcomes, and their alternative outcomes (Wall, 1981b). During the interaction, the negotiators will engage in behavior designed to raise their outcomes to meet their levels of aspiration. Successful behaviors will be continued, while unsuccessful ones will be changed. The negotiators' behaviors will also be influenced by a comparison of the expected negotiation outcomes with the alternative outcomes, those associated with not agreeing.
If the anticipated outcomes are equal to or exceed the alternative outcomes, negotiations will continue to agreement. If the alternative continues to be above the negotiation outcomes, there will be no agreement.

The mediator may influence the course of the negotiation by employing techniques which modify the negotiator's and/or the opponent's aspirations, outcomes, or alternatives. Two techniques which do so are suggestions of agreement points and rewards of concessions.

The mediator's suggestions of agreement points to the negotiator will lower the level of aspiration (Wall, 1982) and provide a face saving device (Pruitt and Johnson, 1970). The negotiator's lowered aspirations lead to larger concessions and more favorable final offers. These larger final offers enable the negotiator to reach more agreements and share in larger joint payoffs. When the negotiators do not receive suggestions, their aspirations remain high, inhibiting large concessions and the ability to reach agreement.

The mediator's suggestions of agreement points to the opponents will produce similar effects. The opponents receiving mediator suggestions will lower their aspiration levels and engage in more cooperative bargaining than opponents with no suggestions.

The mediator's suggestions of agreement points to the negotiator and the opponent should interact facilitating the effects of each other. When both parties receive the same suggested agreement points they will both alter their levels of aspiration toward the common suggested point. This common goal will facilitate the achievement of agreement. Since simultaneous suggestions to both parties increases the cooperation of each one, they will each be reinforcing the other with large concessions. This mutual reinforcement should further increase concession making (Wall, 1977, 1981a).

The mediator's rewards of the negotiators' concessions increases their
cooperativeness by reinforcing their concessions (Wall, 1979) and by adding to their total rewards. The mediator, by making his rewards to the negotiator contingent upon the concession size, directly reinforces concessions increasing the likelihood of their occurrence. The mediator's rewards also contribute to the total rewards available to the negotiator. These rewards, therefore, serve to offset some of the cost incurred through concession-making. The negotiator who receives mediator rewards will make larger final offers, reach more agreements, and share in a larger joint profits than negotiators not receiving rewards.

The mediator rewards and suggestions interfere with each other when they are both applied to the negotiator. Negotiators tend to concede no further than the suggested agreement point; thus limiting the effect of mediator rewards (Wall, 1979). Additionally, the rewards provide a reason for making concessions reducing the face saving value of the mediator's suggestions. Thus, each technique is more potent in the absence of the other.

**Hypotheses**

1. Negotiators receiving a suggested agreement point from the mediator are expected to (a) make larger final offers to the opponent, (b) reach more agreements, and (c) share in a larger joint profit than negotiators not receiving suggested agreement points.

2. Opponents receiving a suggested agreement point from the mediator are expected to (a) make smaller final demands, (b) reach more agreements, and (c) share in a larger joint profit than opponents not receiving suggested agreement points.

3. The mediator's suggestions of agreement points are expected to have stronger effects on the negotiation outcomes when they are proferred to both the negotiator and the opponent.
4. Negotiators receiving rewards for their concessions from the mediator are expected to (a) make larger total concessions, (b) reach more agreements, and (c) share in a larger joint profit than negotiators not receiving rewards.

5. The mediator's suggestions and rewards to the negotiator interact in an inhibitory fashion. The mediator's suggestions have a greater effect on the negotiation outcomes in the no reward condition.

**Method**

**Subjects**

The subjects were 80 undergraduates enrolled in introductory psychology classes. The subjects received class credit for experimental participation.

**Procedure**

Two subjects and a mediator participated in each session. The subjects were randomly assigned to be the union or the management representative. The mediator was seated between the subjects at a table which was divided by two feet high partitions.

The subjects were informed that they would be representing the union or the management in four separate wage negotiations. They were also told that the mediator, who was studying labor relations, could communicate to them any time he wished. The representatives received instructions and their own payoff matrix for the first negotiation. The payoff sheets were constructed so that each gain for one side resulted in an equal loss for the other. The representatives started with $.50. If an agreement was reached, they received the associated payoffs. Failure to reach agreement resulted in a fine of $.05 for each representative. The management representative always made the first offer and passed it to the mediator. After looking at the offer, the mediator passed it to the union representative for a counteroffer. Each side was allowed four offers. Upon completing the first negotiation, the representatives
were given instructions and payoff matrices for the next negotiation. The same procedures were followed for each of the negotiations. After the fourth negotiation, the subjects were asked to complete a brief questionnaire.

Independent Variables

Suggestion to negotiator. In the suggestion to the negotiator condition the mediator sent handwritten messages to the management representative on the third and fourth rounds proposing an agreement point. The suggested agreement point was the figure which split the difference between the second round offers. For example, if the offers on the second round had been $5.38 and $5.50, the mediator's message would be "I suggest you agree at $5.44." In the no suggestion condition the mediator handed the negotiator a sheet on which he had checked the statement "I have no suggestions for this round."

Suggestion to opponent. The union representative was the opponent. The mediator followed the same procedure for suggestions to the opponent as to the negotiator. In the suggestion to the opponent condition the mediator sent the union representative a message on the third and fourth rounds that split the difference between the second round offers. In the no suggestion to the opponent condition the opponent received the message each round indicating the mediator had no suggestion.

Reward to negotiator. In the reward condition, the mediator rewarded the negotiator, the management representative, for each concession to the opponent. The reward was half the amount of the concession. Along with the reward, the mediator sent a handwritten message which said, "Here is ________ for your last offer." In the no reward condition, the mediator sent no money and checked the message indicating no suggestions.

Dependent Variables

The dependent variables included four measurements of the negotiation
outcomes. The negotiator's final offer and the opponent's final demand were expressed as the difference from the current wage ($4.00, $5.00, $6.00, $7.00). The number of agreements reached during the four negotiations ranged from 0 to 4. The joint profit reflects the sum of the initial credits ($.50 each) plus the payoffs for agreements and penalties for deadlocks. The mediator's rewards were not included in the joint payoffs.

Design

A 2 x 2 x 2 x 4 repeated measures design with two levels of suggestion to negotiator (suggestion to negotiator vs. no suggestion to negotiator), two levels of suggestion to opponent (suggestion to opponent vs. no suggestion to opponent), two levels of rewards to negotiator (reward vs. no reward), and four negotiation trials was utilized to analyze the negotiator's final offer and the opponent's final demand. The number of agreements and the total joint profit were analyzed with a 2 x 2 x 2 design.

Results

Suggestion to Negotiator

Hypothesis 1 was supported by the negotiation outcomes. Negotiators made larger final offers to the opponent $F(1, 32) = 6.82, p < .05$ when they received mediator suggested agreement points ($M = .489$) than when they received no suggestions ($M = .400$). The mediators suggestions to the negotiator also tended to result in a larger joint profit $F(1, 32) = 3.09, p < .10$. The mean joint profit when the negotiator received the mediator's suggestions was $.868$, compared to $.811$ in the no suggestion condition.

Suggestions to Opponent

The mediator's suggestions to the opponent did not influence the opponent's final demands, however they did effect three of the negotiation outcomes. The representatives reached more agreements $F(1, 32) = 6.42, p < .05$ when the
opponents received mediator suggestions than when they did not receive mediator suggestions; the means were 2.34 and 1.90, respectively. The presence of mediator suggestion to the opponents increased the joint profit $F(1, 32) = 9.08, p < .01$ of the representatives (means equal .889 and .790 for suggestions and no suggestions). The mediator's suggestions to the opponent, also, effected the negotiator's final offers $F(1, 32) = 6.82, p < .05$. The negotiators gave higher, more favorable, final offers when the opponents received mediator suggestions ($M = .489$) than when they did not ($M = .412$).

**Suggestions to Negotiator - Suggestion to Opponent Interaction**

The predicted interaction between the mediator's suggestion to the negotiator and the opponent was not obtained. There was a three-way interaction between suggestions to the negotiator, suggestion to the opponent, and the negotiation trials, on the opponent's final demands $F(3, 96) = 7.48, p < .01$. As shown in Figure 2, the opponents made smaller, more favorable final demands in the last two negotiations when either they or the negotiators received mediator suggestions, but not when both received suggestions.

**Reward-Suggestion to Negotiator Interaction**

The mediator's rewards to the negotiators failed to have the effects predicted in Hypothesis 4. Inspection of the data (Table 1) reveals that the means generally show small differences in the expected direction. The mediator's rewards did have an effect on the opponents' final demand in a reward by negotiation trial interaction $F(3, 96) = 3.19, p < .05$. The opponents increased their final demands across the negotiation's in the no reward to negotiators condition, but they reduced their final demands when the negotiators were rewarded (Table 2).

Hypothesis 5, the predicted interaction between the two techniques applied to the negotiator, received some support. The presence of reward
tended to interfere with the effect of the suggestions to the negotiator on the joint profit \( F(1, 32) = 3.31, p < .10 \) (Figure 3).

**Questionnaire Data**

The questionnaire responses tended to support the negotiation outcomes. The negotiators perceived the mediator as more helpful \( F(1, 32) = 21.5, p < .01 \), more useful \( F(1, 32) = 21.63, p < .01 \), and stronger \( F(1, 32) = 7.77, p < .01 \), when they received suggestions from the mediator than when they got no suggestions. The effect of the mediator's suggestions on his perceived helpfulness was qualified by an interaction with rewards \( F(1, 32) = 4.80, p < .05 \). The effect of the mediator's suggestions was smaller when rewards were given. The opponents who received mediator suggestions also rated the mediator as more helpful \( F(1, 32) = 21.70, p < .01 \) and more useful \( F(1, 32) = 24.40, p < .01 \).

**Discussion**

The results demonstrated that the mediator's suggestion of agreement points which split the difference between early offers is quite effective. The technique had consistent effects when applied to either the negotiator or the opponent upon their negotiation outcomes and their perceptions.

The mediators' rewards of the negotiators' concessions were not as effective in determining the negotiation outcomes. This was unexpected due to the previously demonstrated effectiveness of the technique (Wall, 1979). The comments on the post-experimental questionnaire suggest an explanation for the weakness of the technique in the present study. Of the negotiators who mentioned the reward in their description of the mediator's technique, the majority failed to make a connection between the rewards and their offers. They perceived the money as given randomly or as an attempt to buy them off.

Despite the weakness of the mediator's rewards in this study, the
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Despite the weakness of the mediator's rewards in this study, the
predicted interaction between rewards and the suggestion to the negotiator was supported. The influence of the mediator's suggestion of an agreement point was diminished by the presence of rewards to the same negotiator. Wall (1979) previously demonstrated a similar interaction between mediator rewards and suggestions of concessions. These findings support the robustness of the hypothesis that when two mediation techniques with similar effects are applied to the same negotiator they will interfere with each other.

There was no support for the proposed facilitative interaction of the same mediator techniques applied simultaneously to the negotiator and the opponent. On the contrary, the interaction of the suggestion to negotiator-suggestion to opponent variables on the opponents' final demand indicates that the techniques interfered with each other in the same manner as similarly acting techniques applied to the same negotiator. This interference may be due to the fact that the final demands of the representatives were indirectly influenced by the mediation techniques applied to the other. The mediator's suggestions to the negotiator may have affected the opponent through a need to reciprocate larger negotiator concessions. Thus, the opponent was faced with the influence of two similar forces.

Whether or not the simultaneous application of mediator techniques to the negotiator and the opponent interacts in a facilitative or interfering manner may depend on the extent to which the techniques produce indirect effects on the opposite negotiator. The facilitative effects may be manifest only when there are no indirect effects. The facilitative and interfering effects are likely to frequently cancel each other, eliminating the interaction of techniques applied to the negotiator and opponent.
References


Table 1
Agreements and Joint Profits

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Table 2

'Reward X Negotiation Effect on Opponents' Final Demands

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Figure Captions

Figure 1. Mediated negotiation system.

Figure 2. Suggestion to negotiator-Suggestion to opponent interaction on the opponent final demand. (Opponents final demand is given in cents above the current wage.)

Figure 3. Reward-Suggestion to negotiator interaction on joint profits. (Joint Profit is given in cents.)
MEDIATED NEGOTIATION SYSTEM

MEDIATOR

NEGOTIATOR

OPPOSING NEGOTIATOR