UvA-DARE (Digital Academic Repository)

Coercive power and concession making in bilateral negotiation

de Dreu, C.K.W.

Publication date
1995

Published in
Journal of Conflict Resolution

[Link to publication](#)

Citation for published version (APA):

de Dreu, C. K. W. (1995). Coercive power and concession making in bilateral negotiation. *Journal of Conflict Resolution*, 39(4), 648-670.

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Coercive Power and Concession Making in Bilateral Negotiation

Carsten K. W. De Dreu

The Journal of Conflict Resolution, Vol. 39, No. 4 (Dec., 1995), 646-670.

Stable URL:

<http://links.jstor.org/sici?sici=0022-0027%28199512%2939%3A4%3C646%3ACPACMI%3E2.0.CO%3B2-R>

The Journal of Conflict Resolution is currently published by Sage Publications, Inc..

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/about/terms.html>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/journals/sage.html>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact jstor-info@jstor.org.

Coercive Power and Concession Making in Bilateral Negotiation

CARSTEN K. W. DE DREU

University of Groningen, The Netherlands

This experiment examined the effects of negotiators' and opponents' coercive capability on level of demand and on communication of threats and promises. Applying conflict spiral and deterrence perspectives inspired contrasting predictions. Subjects were given high, moderate, or low coercive power and learned that their opponents had low, moderate, or high coercive power. Subsequently, subjects negotiated through computers with opponents (in reality, simulated by a computer), who sent compelling threats or promises designed to induce some desired behavior. Higher levels of the focal negotiator's coercive power increased communication of threats but did not influence level of demand. Higher levels of the opponent's coercive power produced greater decline in level of demand but only when the opponent sent threats instead of promises. Power balance produced less communication of threats and greater decline of demand than power preponderance. The conclusion discusses limitations and contributions, as well as the applied value for mediation and dispute resolution.

In their search for profitable agreements, negotiators may use promises or threats to refer to their *coercive power*—their possibility to levy costs on the opposing negotiator (e.g., Bacharach and Lawler 1981; Schelling 1960). The concept of coercive power has played a central role in various lines of research and theory, as developed by social psychologists (e.g., Bacharach and Lawler 1981; Kelley and Thibaut 1978) and political scientists (e.g., Jervis 1976; Leng 1993; Schelling 1960). Notwithstanding its relevance to

AUTHOR'S NOTE: This research was supported by Grant 575-71-011 from the Netherlands Organization for Scientific Research (N.W.O.) awarded to Carsten de Dreu and Evert van de Vliert, and a Royal Netherlands Academy of Sciences Fellowship awarded to Carsten de Dreu. Parts of this research were presented at the 1993 Conference on Conflict Management, Leuven, Belgium. I thank Barbara van Knippenberg for her assistance in data collection, and Ben Emans, Aukje Nauta, Evert van de Vliert, and two anonymous reviewers for their excellent comments on previous versions of this article. Address correspondence to Carsten de Dreu, Department of Psychology, University of Groningen, Grote Kruisstraat 2/1, 9712 TS Groningen, The Netherlands. E-mail may be sent to c.k.w.de.dreu@ppsw.rug.nl.

negotiation theory, the amount of descriptive research addressing effects of coercive power on negotiation process is exceedingly small. Furthermore, this small body of relevant research within both social psychology and political science may be criticized on methodological and theoretical grounds. Finally, this research has considered effects on the negotiator's use of threats and coercive action without taking explicitly into account the negotiator's level of demand and concession patterns. This is an important omission because level of demand and concession pattern are keys to effective negotiation and settlement (e.g., Lax and Sebenius 1986; Leng 1993; Pruitt and Carnevale 1993).

The present research addresses this link between coercive capability and level of demand. In addition, it attempts to demonstrate that effects of coercive power on negotiator level of demand become more pronounced when negotiators use threats rather than promises. This second extension may further the insight into the differential effects of threats and promises on negotiation processes. To these ends, insights from both political science and social psychology will be employed. Contrary to some derivatives of game theory, the perspective taken in the present research is descriptive rather than prescriptive in its orientation. That is, a prescriptive, predominantly game-theoretical perspective is based on an abstract form of reasoning, arising from a combination of mathematics and logic. Such an approach addresses what is rationally correct behavior in conflict situations in which participants are trying to win. The approach adopted here is a behavioral-descriptive one, which addresses what negotiators actually do in conflict situations—whether rationally correct or not (Carnevale and Pruitt 1992). Within this behavioral-descriptive approach, the present research sought to expand toward demand and concession, making Bacharach and Lawler's (1981; Lawler 1992) descriptive model of conflict spiral and bilateral deterrence (originally developed to describe and predict threat exchange and punitive action) a function of own and other's coercive capability.

OWN AND OTHER'S COERCIVE POWER AND LEVEL OF DEMAND

The main question Bacharach and Lawler (1981) asked is what effects level of coercive capability may have on own and other's punitive action. Thus, what happens to coercive actions when the focal negotiator's and/or the opponent's coercive capability is high rather than low? Consistent with interdependence theory (Kelley and Thibaut 1978), coercive power is conceived of not only in relative terms (i.e., which party has more coercive

power), but also in more absolute terms (i.e., how much coercive capability a particular negotiator has). According to Bacharach and Lawler, both the absolute level of coercive capability and the distribution of coercive capability are important determinants of negotiation behavior and outcomes.

LEVEL OF COERCIVE POWER AND CONFLICT SPIRALS

The first theoretical perspective on coercive power and negotiation to be considered here is a conflict spiral perspective. The basic premise is that individuals assume that, ultimately, they can count on only their own strength and that one guarantees security best by expanding one's own coercive power and by attacking one's opponents' coercive capabilities (Jervis 1976). This set of assumptions may give rise to a security dilemma in the sense that if each negotiator seeks expansion of his or her own coercive capabilities to deter opposing negotiators, each will find in the opponent's behavior an ultimate reason to expand further.

Besides gathering coercive power, the security dilemma may give rise to coercive action as well. For example, Jervis (1976, 64) observed that "the drive for security will also produce aggressive actions if the state either requires a very high sense of security or feels menaced by the very presence of other states." This closely parallels social-psychological research and theory (Bacharach and Lawler 1981; Deutsch 1973; Lawler 1992). According to this view of conflict spirals, increasing levels of coercive capability are associated with increasing levels of punitive action (Bacharach and Lawler 1981; Jervis 1992; Lawler 1992). First of all, punitive action is used to deter the other party from employing his or her coercive capability. In addition, increasing levels of coercive capability increase the necessity of conveying a tough image and thus easily escalate into enhanced threat exchange and punitive action. Most important is the assumption that increasing levels of coercive capability increase the temptation to gain relative advantage. Thus higher levels of coercive capability are associated with higher levels of punitive action to deter, as well as to gain (or maintain), relative advantage.¹

Unfortunately, the conflict spiral perspective discussed above fails to distinguish properly between each party's level of coercive capability, and it fails to make specific predictions about level of demand and concession

1. Of course, coercive action may subsequently increase the need to gather additional coercive capabilities, which brings one back to the security dilemma discussed by Jervis (1976). In other words, one may conceive of the political science perspective and the more social-psychological perspective as describing parts of an ongoing process of gathering and using coercive power to secure oneself against one's opponents (see also Rubin, Pruitt, and Kim 1994, 76-81).

making in negotiation. It may be argued, however, that when focal negotiators have high rather than low levels of coercive capability, they will experience greater control over the negotiation and perhaps feel entitled to greater profits, which results in a higher level of aspiration. It is well established that higher aspirations generally lead to higher levels of demand and smaller concessions (e.g., Yukl 1974; for reviews, see Pruitt and Carnevale 1993; Siegel and Fouraker 1960; Wall 1985). Thus the first hypothesis is this:

Hypothesis 1: When the focal negotiator's level of coercive capability increases, reliance on threats will augment, but so will level of demand.

In addition, there is some evidence that an increase in the opponent's coercive power results in a higher expectation of attack, which produces greater use of punitive action by the focal negotiator (Deutsch 1973; Rubin and Brown 1975; Shomer, Kelley, and Davis 1966; Youngs 1986). Likewise, Tedeschi, Bonoma, and Novinson (1970, 74) noted that "there is some inhibition against 'attacking' and imposing costs upon a relatively helpless adversary; but when the adversary is armed . . . the inhibition is removed." Thus higher levels of the opponent's coercive capability seem to enhance the focal negotiator's tendency to employ threats and punitive actions. This probably generalizes to overall negotiator toughness, so that an increase in the other's coercive power produces higher levels of demand. The rationale behind this prediction is that starting with high demands and making small concessions may be one of the many means negotiators have to communicate a tough stance toward their opponents. Examples of such tough bargaining behavior vis-à-vis powerful opponents include the stance taken by Qaddafi in the Lockerby case or that of Saddam Hussein in the weeks preceding the Gulf War. The second hypothesis, then, is this:

Hypothesis 2: To avoid looking weak and to ensure or enlarge one's relative advantage (or to reduce one's relative disadvantage), negotiators may be tempted to make smaller concessions when their opponents' coercive power is high rather than low.

Although one may derive separate predictions for the focal negotiator's level of coercive power and for the opponent's level of coercive power, both probably interact as well. According to the conflict spiral perspective forwarded by Bacharach and Lawler (1981), balance of power will evoke greater exchange of threats and punishments than power preponderance (cf. Jervis 1976). This is because both parties attempt to gain a relative (power) advantage over the other, whereas a power difference leads parties to accept

the status quo (i.e., relatively submissive behavior by the powerless and dominant behavior by the powerful). Thus the third hypothesis is this:

Hypothesis 3: There will be a greater power struggle and concomitant higher levels of demand when there is power balance rather than power difference.

LEVEL OF COERCIVE POWER AND BILATERAL DETERRENCE

The conflict spiral perspective outlined above inspired the prediction that increases in the focal and/or the opposing negotiator's coercive capability will increase threat exchange and level of demand; a deterrence perspective may inspire alternative hypotheses (Bacharach and Lawler 1981). As Halperin (1971, 10) noted: "the primary function of military force should be to prevent the use of military force by one's opponents." Indeed, in their descriptive approach, Bacharach and Lawler (1981) suggested that higher levels of coercive capabilities deter the opposing negotiators from using their punitive capability. Thus, when the opposing negotiator's level of coercive capability is high rather than low, the focal negotiator will have greater fear of retaliation and thus will refrain from using punitive action (Bacharach and Lawler 1981; Thibaut 1968). By implication, a power balance may be characterized by some threat exchange, but certainly less punitive action than power preponderance (Lawler 1992; see also Bueno de Mesquita 1981; Jervis 1976; Singer 1980).

Like the conflict spiral perspective discussed above, the deterrence model was originally developed to deal with coercive action in negotiation. It may inspire, however, predictions about the negotiator's level of demand and concession making. First, a deterrence perspective focuses on the effects of the opponent's capabilities and behaviors and, consequently, makes no clear-cut predictions about the effects of the negotiator's own strength on the negotiator's own concession making. Second, a case can be made that as the opposing negotiator's level of coercive power increases, the focal negotiator may not only refrain from coercive action but also lower his or her level of aspiration and subsequent demands. The reason for arguing this is that as the other's coercive power increases, toughness becomes a relatively risky course of action. Through concession making, one may communicate cooperative intent, which, in turn, may lower the powerful opponent's temptation to engage in coercive action. Thus the fourth hypothesis is this:

Hypothesis 4: Negotiators have lower levels of demand when their opponents' coercive capability is high rather than low.

Note that this hypothesis contradicts the second hypothesis inspired by the conflict spiral perspective.

Equally inconsistent are predictions about level of demand and concession making as a function of power balance. A deterrence theory perspective suggests lower levels of demand when there is power balance rather than power preponderance. This is because when there is power balance, fear of retaliation and expectation of attack are equally strong for both parties, so that the inhibition to use power is equal for both. Fear of retaliation and a concomitant quest for mutual cooperation and avoidance of mutual irritation may stimulate reduction of levels of demand as well as foster concession making. Thus the next hypothesis is in contrast to the third hypothesis based on a conflict spiral perspective:

Hypothesis 5: Power balance produces lower levels of demand than does power preponderance.

EVIDENCE FOR CONFLICT SPIRAL AND DETERRENCE PERSPECTIVES

Conflict spiral and deterrence perspectives tend to make divergent predictions about the effects of level of coercive capability on threat exchange, on punitive action, and, as argued above, on demand and concession making. Qualitative and experimental evidence seem present for each of the two perspectives. As mentioned, there appears to be some support for hypotheses 1 and 2—that increases in own and other's coercive capabilities decrease cooperation in experimental games (e.g., Deutsch 1973). On the other hand, the deterrence hypothesis—that increase in the opponent's coercive power decreases punitive action—has received support in research on bilateral negotiations (Lawler and Bacharach 1987; Lawler, Ford, and Blegen 1988). Also consistent with the deterrence hypothesis is the game-experimental observation made by Rubin and Brown (1975, 221) that "equal power among bargainers is generally likely to result in more effective bargaining than unequal power." Finally, there is some evidence from interstate crises bargaining that power balance leads to less coercive bargaining than does power preponderance (Ferris 1973; Siverson and Sullivan 1983). Therefore, it seems that hypotheses derived from the deterrence perspective may have a slight advantage in accurately predicting negotiation processes over those based on the spiral perspective. This would favor the fourth and fifth hypotheses over the first three.

COERCIVE BARGAINING THROUGH COMPELLENT THREATS OR PROMISES

Bacharach and Lawler (1981) made a convincing case that power needs to be experienced to affect behavior (cf. Komorita, Sheposh, and Braver 1968; Linskold and Bennet 1973). This occurs, for example, not only when negotiators use their power through punitive action but also when they refer to their power via threats or promises (Lax and Sebenius 1986; Leng 1993; Pruitt 1981). Little is known about the precise impact of threats versus promises on the degree to which power becomes important to the negotiation process. In the present research, threats were defined as communicated intentions to use coercive power when requested conditions were not met. Promises were defined as communicated intentions not to use coercive power when requested conditions were met (cf. Pruitt 1981; Rubin and Lewicki 1973). These definitions reveal the focus on coercion and not, for example, on the negotiator's possibility to promise reward (e.g., own concessions). As such, they subscribe to what Schelling (1960, 35) denoted as "communication of one's own incentives, designed to impress on the other the automatic consequences of his act" and to what Rubin, Pruitt, and Kim (1994) referred to as *compellent* threats and promises—those designed to induce some desired behavior (in contrast to deterrent threats and promises, which are designed to prevent some undesirable behaviors).²

Deutsch (1973) argued that threats compared to promises produce more face-saving needs and a stronger desire to retain autonomy over one's own freedom of choice (see also, Heilman 1974). Similarly, Rubin and Brown (1975, 285) noted that "over the course of the bargaining relationship, the use of promises tends to elicit general liking for the transmitter, while the use of threats tends to elicit greater hostility." One obvious way to restore freedom of choice and to express feelings of dislike is to refer to or employ coercive power. Negotiators thus may incorporate into their behavioral strategies their coercive capabilities to a greater extent when their opponents communicate compellent threats rather than promises. As a result, the pre-

2. Compellent and deterrent threats and promises are subclasses of contingent threats and promises. This contrasts with noncontingent threats and promises, in which a particular behavior is made noncontingent on others' behaviors (e.g., "I will punish you"; cf. Tedeschi 1970). There has been some game-experimental research on the effectiveness of threats and promises (Cheney, Harford, and Solomon 1972; Stech, McClintock, and Moss 1984), but these studies have compared contingent threats (e.g., "If you cooperate, I will punish you") with noncontingent promises (e.g., "I will not punish you"). Because it is unclear whether results should be attributed to the contingency-noncontingency difference or to the threat-promise content of the communication, these studies are omitted from the current discussion.

diction inspired by the conflict spiral theory about effects of the focal negotiator's coercive power (hypotheses 1 and 3) will be more valid under the opponent's threats rather than promises.

In addition, there is good evidence that threats tend to elicit more immediate compliance than do promises, because the latter are more ambiguous in what the exact consequences of (non)compliance will be (e.g., Baldwin 1971; Hornstein 1965; Kelley 1965; Shomer, Kelley, and Davis 1966; Smith and Anderson 1975). Rubin, Pruitt, and Kim (1994, 52-3) demonstrated that the threat that one will punish when the opponent fails to concede is less ambiguous in what will happen when the opponent fails to comply than the promise that one will not punish when the other concedes. In the former case, it is clear that noncompliance leads to punitive actions. In the latter situation, however, noncompliance is likely to lead to punitive action, but not necessarily. Therefore, in the case of the opponent's threats more than in the case of the opponent's promises, the other's coercive capabilities may become more important to incorporate into one's strategies and actions. Hence the hypothesized effects of the other's coercive capability (hypotheses 2 and 4) may be more valid when the opponent sends threats rather than promises.

In sum, the opponent's compellent threats versus promises moderate predicted effects on demand level and concession making of the negotiator's own coercive capabilities, of the opponent's coercive capabilities, and of their distribution. Because threats evoke stronger reactance and elicit more negative feelings and because compellent threats are unequivocal about consequences of noncompliance whereas promises are not, threats are predicted to pronounce effects of coercive capabilities.

OVERVIEW AND SUMMARY OF THE HYPOTHESES

The present research continues prior negotiation research and theory in a way that allows a more complete picture of negotiation processes as a function of the negotiator's own coercive power, the other's coercive power, the other's threats versus promises, and their interactions. Specifically, this research attempted to expand the negotiation literature (1) by contrasting predictions on level of demand prompted by a conflict spiral and a deterrence perspective, (2) by carefully disentangling the effects of the negotiator's own coercive power from those of the other's coercive power and those of power differences, and (3) by testing whether power effects on level of demand are indeed more pronounced when the opponent sends threats rather than promises.

The following predictions were submitted to a test.

Hypotheses inspired by the conflict spiral perspective:

1. When the focal negotiator's level of coercive capability increases, reliance on threats will augment, but so will level of demand.
2. Negotiators make smaller concessions when their opponents' coercive power is high rather than low.
3. A greater power struggle and concomitant higher levels of demand will be observed when there is power balance rather than when there is power preponderance.

Hypotheses inspired by the deterrence perspective:³

4. Negotiators have lower levels of demand when their opponents' coercive capability is high rather than low (this contrasts with hypothesis 2).
5. Power balance will lead to lower levels of demand than will power preponderance (this contrasts with hypothesis 3).

A comparative analysis of compellent threats and promises further suggested the general hypothesis that any of these first five predictions will be more valid when the opposing negotiator sends threats rather than promises.

METHOD

DESIGNS

The hypotheses tested could be classified as those that deal with the effects of absolute coercive capability (i.e., hypotheses 1, 2, and 4) and those that deal with relative coercive capability (i.e., hypotheses 3 and 5). To test the first subset of hypotheses, a $3 \times 3 \times 2 \times 3$ factorial design was employed; own power (low vs. moderate vs. high), other's power (low vs. moderate vs. high), and tactic (other's threats vs. other's promises) were between-subjects variables. Negotiation block (first vs. second vs. third block of offer exchanges) was treated as a repeated measures variable and was added to study decline in level of demand (i.e., concession making).

To test the second subset of hypotheses, a specific contrast was used that unconfounded power difference from levels of own and other's power (see

3. It should be emphasized that conflict spiral and deterrence perspectives are alternative models explaining coercive action in negotiation. The current research deals with predictions about demand level inspired by each of these models, so that evidence for or against them speaks to demand level in negotiation, rather than to the general validity of the conflict spiral or the deterrence model.

TABLE 1
Overview of the Design

<i>Other's Coercive Power</i>	<i>Own Coercive Power</i>		
	<i>Low (20%)</i>	<i>Moderate (50%)</i>	<i>High (80%)</i>
Low (20%)	Cell 1	Cell 2	Cell 3
Moderate (50%)	Cell 4	Cell 5	Cell 6
High (80%)	Cell 7	Cell 8	Cell 9

Table 1). Specifically, the level of demand in cells 2, 3, and 6 (subjects have more power than their opponents) and in cells 4, 7, and 8 (subjects have less power than their opponents) was tested against the level of demand in cells 4, 7, and 8 (subjects and their opponents are equally powerful). This comprised a $2 \times 2 \times 3$ design, involving power difference (equal vs. less + more), tactic (other's threats vs. other's promises), and block.

As mentioned, the main dependent variable in the above designs was the subject's level of demand. Additional variables were the subject's communication of threats, competitive messages, promises, and cooperative messages.

SUBJECTS

A total of 170 male and female freshman at the University of Groningen participated in the experiment, for which they received 10 Dutch guilders (about 5 U.S. dollars). Subjects were assigned to experimental conditions on a random basis, and the experimenters were blind to this assignment.

PROCEDURE

Subjects came to the laboratory in groups of six to eight; they were welcomed by a male or a female experimenter. Each subject was seated in a separate cubicle in front of a microcomputer, which presented the instructions, the negotiation task, and a questionnaire. The subjects learned that they were about to negotiate with another participant via the computer. In reality, however, this other party was simulated by a computer program.

Negotiation Task

The task was a computerized version of the one used in past negotiation research (e.g., Carnevale and Lawler 1986). It captures some main charac-

teristics of negotiation (i.e., multiple issues differing in usefulness to the negotiator, information about one's own payoffs only). (For an extended discussion, see De Dreu and Van Lange forthcoming.) To avoid the possibility that the subject's role was implicitly associated with some power position in real life, the task was made context free (Lawler, Ford, and Blegen 1988). That is, we simulated a negotiation between party A (the subject) and party B (the opponent) about three issues, referred to as issue 1, issue 2, and issue 3. Subjects were shown an issue chart that listed 15 levels of possible agreement per issue (denoted by a number from 1 to 15) with a corresponding positive number that represented the profit value at each agreement level. For issue 1, level 15 gave \$0 profit, and level 1 gave \$2,800 profit (i.e., increments of \$200 per level). For issue 2, level 15 gave \$0 profit, and level 1 gave \$4,200 profit (i.e., increments of \$300 per level). For issue 3, level 15 gave \$0 profit, and level 1 gave \$7,000 profit (i.e., increments of \$500 per level). Subjects were told, "You can see that the best deal for you is 1-1-1, for a total outcome of \$14,000 (\$2,800 + \$4,200 + \$7,000)." The corresponding chart for party B was not displayed.

To enhance subjects' involvement in the task, they were told that at the end of the study, the negotiation outcomes would be converted into lottery tickets that would give them a chance of winning one of three 50-guilder prizes; thus the larger their profit, the greater the chance of obtaining a prize. (After they had completed the study, the subjects were told that each of them had an equal chance in the lottery.) Finally, subjects were informed that party B would make the first offer, that they could respond with a counteroffer and with a message, and that the negotiation would end upon agreement or when time ran out. In the latter case, no points would be obtained, and hence no lottery prize should be anticipated.

Following these instructions, the negotiation with party B began. Party B made the first offer, after which the subjects were prompted to respond with a counteroffer and, if they wanted, a prewritten message (see Table 2). This procedure was repeated until the subject matched party B's proposal or until completion of the sixth round. As in our previous research (e.g., De Dreu et al. 1994; De Dreu and Van Lange forthcoming), an opponent was simulated whose concession pattern was neither competitive nor cooperative. Over the six rounds of negotiation, party B proposed the following levels of agreements (for issues 1-2-3): 14-13-15, 13-13-14, 13-12-13, 12-10-12, 11-10-11, 9-10-10.

The negotiation was interrupted after the sixth round regardless of whether the subject had reached agreement. This was done because the hypotheses pertained to level of demand, and evidence for or against them would be obtained by round 6. Also, previous studies have indicated that up to the sixth

TABLE 2
Prewritten Messages Subjects Could Send to Their Opponents

<i>Number</i>	<i>Message</i>
0	No message will be sent.
1	If you don't concede any further, I'll lower your assets.
2	Don't forget that I can lower your assets.
3	Don't think I'll make any more concessions.
4	I'm concerned about my interests, not about yours.
5	If you make more concessions, I won't lower your assets.
6	I don't intend to lower your assets.
7	Let us be more conciliatory.
8	Your interests are of great importance to me.

NOTE: Messages have been translated from Dutch. Subjects could send one message per negotiation round.

round, few subjects suspect that they are playing against a computer, whereas after the sixth round, such suspicion usually increases rapidly. In this experiment, no subject settled before round 6 (i.e., no subjects matched party B's offer before round 6), and during the debriefing, no subject voiced serious suspicion about the existence of party B.

INDEPENDENT VARIABLES

Manipulation of Own and Other's Power

Own power and other's power were manipulated as in prior negotiation research (e.g., Lawler, Ford, and Blegen 1988). Just before the negotiation started, subjects read that

in real-life negotiations, parties have the possibility to put pressure on the other negotiator. In this investigation, each party has some capability to put pressure on the other negotiator. That is to say, each of you has a current asset of 7,000 points, which represents a fair amount of lottery tickets and thus a good chance of winning one of the three 50-guilder prizes we have available for this study. If desired, you can lower your other negotiator's assets, and vice versa.

In the low-own-power condition, the subjects were told that they could reduce the other's assets of 7,000 points by 20%. In the moderate-own-power condition, the subjects were told that they could reduce the other's assets of 7,000 points by 50%. In the high-own-power condition, the subjects were told that they could reduce the other's assets of 7,000 points by 80%.

Subjects were then informed about the other's coercive capability. In the low-other's-power condition, the subjects were told that party B could reduce their assets of 7,000 points by 20%. In the moderate-other's-power condition, the subjects were told that party B could reduce their assets of 7,000 points by 50%. In the high-other's-power condition, the subjects were told that party B could reduce their assets of 7,000 points by 80%.

Subjects were finally told that "at some point during the negotiation, each of you will be given the possibility to lower the other's assets, if desired. We will come back to this later on." This information was meant to enhance the credibility of the manipulation of other's tactic (see below). In reality, however, subjects were never given this opportunity.

Manipulation of Tactic

Along with the second, third, and fifth offer, party B sent a message to the subject. In the threat condition, party B always sent a compelling threat—that is, message 1 from Table 2. In the promise condition, party B always sent a compelling promise—that is, message 5 from Table 2. Note that both ask for more concessions and that both ensure no punishment in case of compliance. The only difference is in the clarity of what happens in the case of noncompliance.

DEPENDENT VARIABLES

The hypotheses pertained to the subject's level of demand, which was calculated by summing the points associated with the subject's proposal on a specific round of negotiation. Thus, for example, proposal 1-1-1 represented a demand of \$14,000 (\$2,800 + \$4,200 + \$7,000), and proposal 15-15-15 represented a demand of \$0 (\$0 + \$0 + \$0). To study decline in demand (i.e., the concession pattern), negotiator demand was averaged over rounds 1 and 2, over rounds 3 and 4, and over rounds 5 and 6. (Note that each block contains a message sent by the opponent.)

To supplement the data for level of demand, the messages that subjects sent on each round were registered. As shown in Table 2, two messages were threats (message 1 and 2), two were more generally competitive messages (message 3 and 4), two clearly constituted a promise (message 5 and 6), and two messages were generally cooperative (message 7 and 8). We also left subjects with the option of no communication (message 0). Manipulation checks in the postnegotiation questionnaire are described in detail in the following section.

RESULTS

MANIPULATION CHECKS

To check the manipulation of own power, subjects were asked to indicate the percentage by which they could reduce the other's assets (1 = 100%, 4 = 50%, 7 = 0%). An ANOVA showed that subjects gave higher ratings ($M = 5.76$) when they had high power than when they had moderate power ($M = 4.53$) or low power ($M = 2.73$), $F(2, 152) = 199.99$, $p < .001$.

To assess the adequacy of the other's power manipulation, subjects were asked to rate the percentage of their own assets party B could affect (1 = 0%, 4 = 50%, 7 = 100%). As expected, subjects gave higher ratings ($M = 5.82$) when party B had high power than when party B had moderate power ($M = 4.14$) or low power ($M = 3.07$), $F(2, 152) = 108.18$, $p < .001$.

On the question "How cooperative do you find party B?" (on a scale from 1 = *not at all* to 6 = *very much*), an ANOVA showed a main effect for tactic, $F(1, 152) = 13.36$, $p < .001$. In line with the manipulation of tactic, subjects rated their opponents as less cooperative in the other's-threat condition ($M = 3.16$) than in the other's-promise condition ($M = 3.85$).

LEVEL OF DEMAND

To test the hypotheses dealing with the effects of own and other's level of coercive capability, level of demand was submitted to $3 \times 3 \times 2 \times 3$ (Own Power $\times$ Other's Power $\times$ Tactic $\times$ Block) MANOVAs; the last factor was a repeated measures variable.

The Effects of Own Power, Other's Power, and Tactic

The conflict spiral perspective prompted the hypothesis that an increase in the focal negotiator's coercive power produces higher levels of demand. There was, however, no support for this first hypothesis. That is, MANOVAs yielded no main effect for own power, or interactions between block, own power, and tactic, all F s < 1 .

The conflict spiral perspective further inspired the second hypothesis—that an increase in the opponent's coercive power produces higher levels of demand, especially when the opponent sends threats rather than promises. Deterrence theory, in contrast, inspired the fourth hypothesis—that an increase in the other's coercive power produces lower levels of demand, especially when the other party sends threats rather than promises. MANO-

VAs yielded a main effect for block, showing that level of demand declined over rounds, $F(2, 151) = 169.98, p < .001$, and a significant three-way interaction between block, other's power, and tactic, $F(4, 304) = 2.60, p < .036$.⁴ Simple-effect analyses showed that in the other's-threat condition, the Block $\times$ Other's Power interaction was significant, $F(4, 158) = 2.55, p < .05$. Level of demand declined more when the opponent had high rather than moderate or low coercive capability (see Figure 1). In the other's-promise condition, no effects involving other's power were significant, all $F(4, 146) < 1$ (cf. Figure 1). Taken together, these results support the fourth hypothesis, inspired by deterrence theory.

Effects of Power Difference and Tactic

The conflict spiral perspective prompted hypothesis 3—that power preponderance leads to lower levels of demand than does power balance, especially when the opponent sends threats rather than promises. Deterrence theory inspired the contrasting prediction that a power difference leads to higher levels of demand than does power balance (hypothesis 5), especially when the opponent sends threats rather than promises. To test these hypotheses, level of demand was submitted to $2 \times 2 \times 3$ (Power Difference: Equal vs. Unequal $\times$ Tactic: Threats vs. Promises $\times$ Block) MANOVAs; block as a repeated measures variable. The main effect for block, $F(2, 165) = 156.02, p < .001$, was qualified by an interaction between block and power difference, $F(2, 165) = 5.32, p < .006$. Figure 2 shows stronger decline in level of demand when there was power balance (from $M = 10,707$ to $M = 7,793$) than when there was power difference (from $M = 10,665$ to $M = 8,593$). These data are consistent with the fifth hypothesis. No support was found, however, for the proposition that the effects of power difference would be stronger in the other's-threat condition than in the other's-promise condition, $F < 1$.⁵

4. The design further yielded a complex Own Power $\times$ Other's Power $\times$ Tactic $\times$ Block interaction, $F(8, 304) = 2.53, p < .011$. Means indicated that this effect reduced primarily to differences between the unequal and equal power conditions.

5. An alternative analysis would be to submit level of demand to a 3 (power difference: subject has less, equal, or more power) $\times$ 2 (tactic: threats vs. promises) $\times$ 3 (block) MANOVA, with block as a repeated measures variable. Doing so yields a main effect for power difference, $F(2, 164) = 4.07, p < .025$, showing that having less or equal coercive power than the opponent produced lower levels of demand than having more coercive power ($ps < .05$). A Power Difference $\times$ Block interaction, $F(4, 328) = 2.94, p < .025$, and a Power Difference $\times$ Tactic $\times$ Block interaction, $F(4, 328) = 2.55, p < .05$, further show these effects to become stronger as negotiation proceeds, and especially when the other sends threats, $F(4, 166) = 3.18, p < .014$ for the Power Difference $\times$ Block interaction, rather than promises, $F(4, 158) = 2.02, p < .10$ for the Power Difference $\times$ Block interaction. These data are generally consistent with the deterrence perspective.

Figure 1a: Level of Demand as a Function of Other's Power, Tactic, and Block

Figure 1b:

Figure 2: Level of Demand as a Function of Power Difference and Block

NEGOTIATOR COMMUNICATION

As mentioned, subjects could send threats, competitive messages, promises, and cooperative messages. Correlations between these four categories are given in Table 3. Because other's tactic had a pervasive effect on communication (see below), correlations are broken down for the other's-threat and the other's-promise condition. The top row lists associations with decline in level of demand (i.e., level of demand in block 1 minus that in block 3).

Communication of threats was negatively correlated with communication of promises and of cooperative messages. Also, and particularly in the other's-threat condition, communication of threats was negatively associated with communication of competitive messages. This may suggest that threats are used to reciprocate, rather than to convey, a tough stance. Finally, decline in level of demand was barely associated with communication in the other's-promise condition. In the other's-threat condition, however, greater decline was associated with less competitive and with more cooperative messages.

TABLE 3
Correlations between the Communication
Categories, Broken Down for Other's Tactic

	<i>Other's Tactic</i>							
	<i>Promise</i>				<i>Threat</i>			
	2	3	4	5	2	3	4	5
1. Decl.	.02	-.07	-.02	-.03	.04	-.18*	.04	.23*
2. Threat		-.21*	-.35*	-.26*		-.04	-.34*	-.38*
3. Number of competitive messages				-.07			-.23	-.17*
4. Promise				.02				-.24*
5. Number of cooperative messages				—				—

NOTE: $N = 85$. Decl. = decline in level of demand (block 1 – block 3).

* $p < .05$, one-tailed.

The four communication parameters were submitted to two MANOVAs. The first explored main and interaction effects of own power, other's power, and tactic (thus supplementing the tests of hypotheses 1, 2, and 4). The second explored main and interaction effects of power difference and tactic (thus supplementing the test of hypotheses 3 and 5).

Own and Other's Power

The $3 \times 3 \times 2$ MANOVA yielded multivariate effects for tactic, $F(4, 149) = 9.12, p < .001$, and for own power, $F(8, 296) = 2.40, p < .016$. Cell means are given in Table 4. Univariate F tests showed that compared to other's promises, other's threats produced more counterthreats, $F(1, 152) = 25.03, p < .001$, more competitive messages, $F(1, 152) = 6.69, p < .011$, and fewer promises, $F(1, 152) = 8.23, p < .005$. These effects thus corroborate prior research in that they show that other's threats, as well as other's promises, were reciprocated and that other's threats produce more general competitiveness than did other's promises.

The own power effect indicated that compared to a high or moderate level of own power, a low level of own power yielded fewer threats, $F(2, 152) = 8.25, p < .001$, and somewhat more promises, $F(2, 152) = 2.64, p < .075$. This is consistent with the notion that higher levels of coercive capability are associated with a higher need for conveying a tough stance.

TABLE 4
Negotiator Communication as a Function of Own Power and Tactic

	<i>Own Coercive Power</i>					
	<i>High</i>		<i>Moderate</i>		<i>Low</i>	
	<i>Promise</i>	<i>Threat</i>	<i>Promise</i>	<i>Threat</i>	<i>Promise</i>	<i>Threat</i>
Threat	0.92	1.62	0.90	1.69	0.14	1.11
Competitive messages	0.38	0.62	0.33	0.59	0.36	0.63
Promise	1.08	0.55	1.40	0.75	1.46	1.19
Cooperative messages	2.04	1.69	1.57	1.72	2.21	1.63

NOTE: Entries reflect the number of times a message was sent (out of a maximum of six negotiation rounds).

TABLE 5
Communication as a Function of Power Difference and Tactic

	<i>Power Difference</i>			
	<i>Equal</i>		<i>Unequal</i>	
	<i>Promise</i>	<i>Threat</i>	<i>Promise</i>	<i>Threat</i>
Threat	0.88	1.48	0.55	1.50
Competitive messages	0.43	0.65	0.16	0.53
Promise	1.41	0.76	1.13	0.90
Cooperative messages	2.02	1.79	1.71	1.47

NOTE: Entries reflect the number of times a message was sent (out of a maximum of six negotiation rounds).

Effects of Power Difference and Tactic

The 2×2 MANOVA yielded multivariate effects for tactic, $F(4, 163) = 7.71, p < .001$, and for power difference, $F(4, 163) = 2.38, p < .05$. Means are given in Table 5. Generally, other's threats compared to other's promises produced more counterthreats, more competitive messages, and fewer promises, all univariate $F(1, 166) > 5.54$, all $ps < .025$.

Compared to power difference, power balance produced somewhat fewer competitive statements, $F(1, 166) = 3.22, p < .075$, and somewhat more cooperative messages, $F(1, 166) = 3.45, p < .065$. These data lend further

support for the hypothesis that power balance induces less power struggle than does power preponderance (cf. the deterrence perspective).

CONCLUSIONS AND DISCUSSION

This research was concerned with the negotiator's level of demand and communication patterns as a function of own and opponent's level of coercive capability, opponent's threat or promise, and their interactions. Predictions about level of demand and concession patterns were inspired by two general models of coercive action in negotiation—the conflict spiral and the bilateral deterrence models (Bacharach and Lawler 1981; Jervis 1976; Schelling 1960). Results showed that increasing levels of the focal negotiator's coercive capability leads to greater reliance on threats, less communication of promises, but to neither more nor less concession making. In addition, data showed that increasing levels of the opponent's coercive capability leads to lower levels of demand, especially when the opponent sends threats instead of promises. This falsifies the second hypothesis but confirms the fourth prediction, inspired by deterrence theory. Finally, results revealed that power balance leads to somewhat fewer competitive communications and significantly lower levels of demand than does power preponderance. This is in contrast to hypothesis 3 but in line with hypothesis 5. In sum, then, the current experiment largely supported predictions inspired by the deterrence perspective forwarded by Bacharach and Lawler (1981; Lawler 1992). More important, the experiment obtained good support for the general contention that effects of coercive capabilities would be more pronounced when the opponent sends compelling threats rather than promises. Below, results will be discussed in terms of their general contribution to the negotiation literature. Also, some implications for effective negotiation and for mediator intervention will be discussed.

The overall support for predictions prompted by a deterrence perspective is consistent with prior negotiation research on punitive action (Bacharach and Lawler 1981; Lawler, Ford, and Blegen 1988; Lawler and Bacharach 1987), and it expands these findings to level of demand in negotiation. As mentioned, this contribution may prove to be important, because level of demand is a key variable in predicting outcomes from the negotiation. That is, greater decline in level of demand generally yields lower outcomes but also quicker compromises (for reviews, see Carnevale and Pruitt 1992; Thompson 1990). For pragmatic reasons, the present experiment interrupted negotiation halfway (i.e., after round 6). Future research might test the

prediction suggested by the present data that higher levels of the opponent's coercive power produce quicker compromises, especially when the opponent communicates compelling threats rather than promises.

Because present research supports and qualifies predictions prompted by a deterrence perspective does not mean that the conflict spiral view is invalid and should be rejected. As mentioned earlier (see footnote 2), each of these two models is designed to deal with coercive action and threat exchange in bilateral negotiations. Thus current extensions toward demand level and concession making may prove useful because they imply a first step toward incorporating the full negotiation process into one comprehensive theory. Rather than rejecting conflict spiral theory on the basis of the present results, it would prove interesting to conduct further research addressing the question of whether effects of coercive power on demand level and concession patterns do instigate a conflict spiral process. That is, lowering one's demands in the face of the opponent's communication of threats might evoke cooperation on the part of the opponent; reciprocation is indeed a powerful process in the domain of both interpersonal and international relations (cf. Axelrod 1980; Leng 1993). However, yielding in the face of the opponent's coercive bargaining may trigger even more competitive reactions in the opponent, especially when the opponent is focused on winning. Thus more research is needed to determine whether more concession making because of higher levels of coercive power subsequently produces more or less threat exchange and punitive action.

Besides linking coercive capability to negotiator demand and concession making, the present research suggests that coercive power affects negotiation processes especially when threats are used. As expected, the opponent's compelling threats as compared to promises produced more counterthreats and more competitive statements but also pronounced effects of the other's power. First, this underlines the idea that there should be a communicated willingness to exercise one's power for it to affect negotiation processes (Bacharach and Lawler 1981; Komorita, Sheposh, and Braver 1968). Second, it explains the current observation that effects of power became stronger as negotiation continued. Third, these results suggest that negotiators with low power should use promises rather than threats, in part because doing so makes their powerless position less salient. Note that this is exactly what low-power subjects did in the present experiment (see row 3 of Table 4).

The data pattern for threats compared to the pattern for promises gives some insight into the psychological mechanisms at work. If the differential influence of threats versus promises was due to enhanced reactance and disliking, the opponent's threats versus promises should have interacted with the focal negotiator's coercive capability. If, on the other hand, the differential

influence of threats versus promise was due to the greater clarity of threats as compared to promises about the consequences of noncompliance, the opponent's threats versus promises should have interacted with the opponent's coercive capability. Because the latter but not the former interaction was observed, one may conclude that compelling threats pronounce effects of coercive capability because they are unequivocal rather than because they elicit reactance. This suggests sober calculation of risk, costs, and benefits on the part of the subject, which is consistent with deterrence perspectives (e.g., Bacharach and Lawler 1981; Jervis 1976; Schelling 1960, 1966).

The present research was limited to compelling threats and promises and did not consider deterrent threats designed to keep the opponent from engaging in undesirable behaviors (for discussions, see Rubin, Pruitt, and Kim 1994; Schelling 1960, 1966). In addition, the present experiment focused exclusively on coercive actions and not on the negotiator's possibility to reward the opponent for compliance—for example, by making additional concessions. In fact, there is relatively little research attention to effects of reference made to, or actual employment of, reward power. Future research might address these issues in more depth. Also, in the present experiment, using power implied no costs to the user, only to the target negotiator. This operationalization of coercive power was chosen to stay as close as possible to prior research (e.g., Lawler, Ford, and Blegen 1988). Although not very common, there are real-life situations in which using power remains without clear-cut costs. For example, the British government's prohibiting Sinn Féin and the Irish Republican Army from broadcasting on national television is a coercive act that has no direct cost to British government. Similarly, entrepreneurs in the United States may fire strikers with no other cost than finding replacement workers.

In most situations, however, threat enforcement bears some cost to the threatener as well. An example would be the situation in which a union calls for a strike and has to pay strikers' salaries. Mogy and Pruitt (1974) found the credibility and effectiveness of threats to be an inverse function of the cost of threat enforcement. Because, in the present experiment, no cost was associated with threat enforcement, threats (and promises) may have been relatively credible and effective. Increasing cost associated with using power may, however, reduce the expectation of attack as well as the fear of retaliation—two key variables in the deterrence perspective forwarded by Bacharach and Lawler (1981; Lawler, Ford, and Blegen 1988). Future research might investigate whether processes observed in the present research generalize toward situations in which threat enforcement bears costs to both parties.

Previous discussion has already touched on some of the limitations of the present research. Most of these limitations concern design issues and thus may be easily addressed in future research. A final limitation is that this research employed a simulated negotiation in a highly controlled laboratory setting with undergraduate students as negotiators. Experimental control is useful, especially when investigating minor variations in the formulation of the opponent's communications (cf. De Dreu et al. 1994), but it potentially reduces the external validity of the research. It is encouraging to note, however, that at least some of the present conclusions prove fairly consistent with findings obtained in other laboratories (e.g., Deutsch 1973; Lawler, Ford, and Blegen 1988) as well as in the domain of international relations (e.g., Leng 1993; Siverson and Sullivan 1983).

Notwithstanding its limitations and constraints, the present research may have some applied value for mediators assisting disputants in resolving their conflict of interest. There is an assumption that mediators should attempt to balance power between the parties (Rubin, Pruitt, and Kim 1994; Wall 1981). Research indeed has shown that professional and inexperienced mediators try to balance power between the parties (Ippolito and Pruitt 1991; Laskewitz, Van de Vliert, and De Dreu 1994). The present study points to some of the advantages of this intervention—decreasing levels of demand, and less competitive and more cooperative communication. However, it also suggests that increasing the power of the powerless party A may be more effective than decreasing the power of the powerful party B. That is, the latter intervention creates power balance but also increases party A's level of demand. The former intervention, by contrast, not only creates power balance but also reduces party B's toughness.

To conclude, this experiment suggests that in bilateral negotiation, higher levels of own coercive power elicit more reliance on threats and, as shown in prior research, less punitive action. This makes one's own coercive power especially salient to the opposing negotiator, who subsequently lowers his or her level of demand but is also strongly inclined to reciprocate threats with threats. Provided that the opponent is equally powerful, mutual low levels of demand but deterrence through high exchange of threats will be the ultimate consequence.

REFERENCES

- Axelrod, R. 1980. *The evolution of cooperation*. New York: Basic Books.
 Bacharach, S. B., and E. J. Lawler. 1981. *Bargaining*. San Francisco: Jossey-Bass.
 Baldwin, D. A. 1971. Thinking about threats. *Journal of Conflict Resolution* 15:71-8.

- Bueno de Mesquita, B. 1981. Risk, power distributions and the likelihood of war. *International Studies Quarterly* 25:541-68.
- Carnevale, P. J., and E. J. Lawler. 1986. Time pressure and the development of integrative agreements in bilateral negotiations. *Journal of Conflict Resolution* 30:636-59.
- Carnevale, P. J., and D. G. Pruitt. 1992. Negotiation and mediation. *Annual Review of Psychology* 43:531-82.
- Cheney, J., T. Harford, and L. Solomon. 1972. The effects of communicating threats and promises upon the bargaining process. *Journal of Conflict Resolution* 16:99-107.
- De Dreu, C.K.W., P. J. Carnevale, B.J.M. Emans, and E. Van De Vliert. 1994. Effects of negotiator frames: Loss aversion, mismatching and frame adoption. *Organizational Behavior and Human Decision Processes* 60:90-107.
- De Dreu, C.K.W., and P.A.M. Van Lange. Forthcoming. Impact of social value orientation on negotiator cognition and behavior. *Personality and Social Psychology Bulletin*.
- Deutsch, M. 1973. *The resolution of conflict*. New Haven, CT: Yale University Press.
- Ferris, W. 1973. *The power capabilities of nation-states*. Lexington MA: Lexington Books.
- Halperin, M. 1971. *Defense strategies for the seventies*. Boston: Little, Brown.
- Heilman, M. E. 1974. Threats and promises: Reputational consequences and transfer of credibility. *Journal of Experimental Social Psychology* 10:310-24.
- Hornstein, H. A. 1965. The effects of different magnitudes of threat upon interpersonal bargaining. *Journal of Experimental Social Psychology* 1:282-93.
- Ippolito, C. A., and D. G. Pruitt. 1991. Power balancing in mediation: Outcomes and implications of mediator intervention. *International Journal of Conflict Management* 1:341-55.
- Jervis, R. 1976. *Perception and misperception in international politics*. Princeton, NJ: Princeton University Press.
- . 1992. Implications of loss aversion for political psychology. *Political Psychology* 13:187-204.
- Kelley, H. H. 1965. Experimental studies of threats in interpersonal negotiations. *Journal of Conflict Resolution* 9:79-105.
- Kelley, H. H., and J. Thibaut. 1978. *Interpersonal relations: An interdependence approach*. New York: John Wiley.
- Komorita, S. S., J. P. Sheposh, and S. L. Braver. 1968. Power, the use of power, and cooperative choice in a two-person game. *Journal of Personality and Social Psychology* 8:134-42.
- Laskewitz, P., E. Van de Vliert, and C.K.W. De Dreu. 1994. Organizational mediators siding with or against the powerful party? *Journal of Applied Social Psychology* 24:176-88.
- Lawler, E. J. 1992. Power processes in bargaining. *Sociological Quarterly* 33:17-34.
- Lawler, E. J., and S. B. Bacharach. 1987. Comparison of dependence and punitive forms of power. *Social Forces* 66:446-62.
- Lawler, E. J., R. S. Ford, and M. A. Blegen. 1988. Coercive capability in conflict: A test of bilateral deterrence versus conflict spiral theory. *Social Psychology Quarterly* 51:93-107.
- Lax, S., and J. Sebenius. 1986. *The manager as negotiator*. New York: Free Press.
- Leng, R. J. 1993. Reciprocating influence strategies in interstate crisis bargaining. *Journal of Conflict Resolution* 37:3-41.
- Linskold, S., and R. Bennet. 1973. Attributing trust and conciliatory intent from coercive power capability. *Journal of Personality and Social Psychology* 28:180-6.
- Mogy, R. B., and D. G. Pruitt. 1974. Effects of threatener's enforcement costs on threat credibility and compliance. *Journal of Personality and Social Psychology* 29:173-80.
- Pruitt, D. G. 1981. *Negotiation behavior*. New York: Academic Press.
- Pruitt, D. G., and P. J. Carnevale. 1993. *Negotiation in social conflict*. Buckingham, UK: Open University Press.

- Rubin, J. Z., and R. Brown. 1975. *The social psychology of bargaining and negotiation*. New York: Academic Press.
- Rubin, J. Z., and R. J. Lewicki. 1973. A three-factor experimental analysis of promises and threats. *Journal of Applied Social Psychology* 3:240-57.
- Rubin, J. Z., D. G. Pruitt, and S. Kim. 1994. *Social conflict: Escalation, stalemate, and settlement*. New York: McGraw-Hill.
- Schelling, T. C. 1960. *The strategy of conflict*. Cambridge, MA: Harvard University Press.
- . 1966. *Arms and influence*. New Haven, CT: Yale University Press.
- Shomer, R. W., H. H. Kelley, and A. H. Davis. 1966. Threats and the development of coordination: Further studies of the Deutsch and Krauss trucking game. *Journal of Personality and Social Psychology* 4:119-26.
- Siegel, S., and L. E. Fouraker. 1960. *Bargaining and group decision making: Experiments in bilateral monopoly*. New York: McGraw-Hill.
- Singer, J. D. 1980. Accounting for international war. *Annual Review of Sociology* 6:349-67.
- Siverson, R. M., and M. P. Sullivan. 1983. The distribution of power and the onset of war. *Journal of Conflict Resolution* 27:473-94.
- Smith, W. P., and A. J. Anderson. 1975. Threats, communication, and bargaining. *Journal of Personality and Social Psychology* 32:76-82.
- Stech, F. J., C. M. McClintock, and B. F. Moss. 1984. The effectiveness of the carrot and the stick in increasing dyadic outcomes during duopolistic bargaining. *Behavioral Science* 29:1-12.
- Tedeschi, J. T. 1970. Threats and promises. In *The structure of conflict*, edited by P. Swingle, 155-91. New York: Academic Press.
- Tedeschi, J. T., T. V. Bonoma, and N. Novinson. 1970. Retaliation vs. fixed opportunity costs: The behavior of a threatening source. *Journal of Conflict Resolution* 14:69-76.
- Thibaut, J. 1968. The development of contractual norms in bargaining: Replication and variation. *Journal of Conflict Resolution* 12:102-12.
- Thompson, L. L. 1990. Negotiation behavior and outcomes: Empirical evidence and theoretical issues. *Psychological Bulletin* 108:515-32.
- Youngs, G. A. 1986. Patterns of threat and punishment reciprocity in a conflict setting. *Journal of Personality and Social Psychology* 51:541-6.
- Yukl, G. A. 1974. Effects of situational variables and opponent concessions on a bargainer's perception, aspirations, and concessions. *Journal of Personality and Social Psychology* 29:227-36.
- Wall, J. A. 1981. Mediation: An analysis, review, and proposed research. *Journal of Conflict Resolution* 25:157-80.
- . 1985. *Negotiation: Theory and practice*. Glenview, IL: Scott, Foresman.