

Abstract:

Chief negotiators are uniquely positioned to affect the level of collective bargaining conflict because of their roles as external representatives and information processors during negotiations. The nature of these effects should be of special interest to government administrators who are concerned about improving their self-resolution track record in collective bargaining. In this article, the authors use a unique 1992 survey of municipal chief negotiators to examine the impact of various chief negotiator characteristics on the likelihood of impasses occurring in negotiations with municipal police unions. The findings support two major conclusions. First, chief negotiators who are positioned higher in the management hierarchy experience fewer collective bargaining impasses than do those who are lower in the organization. Second, negotiators' strategies and personality characteristics significantly influence the likelihood of an impasse but, in general, demographic characteristics of negotiators and environmental factors do not.

Collective bargaining impasses are costly, particularly when unions and managements use sanctions such as strikes or lockouts to force concessions from their bargaining opponent. To reduce these costs, state and local governments generally prohibit the use of such sanctions in public sector collective bargaining. In their place, a variety of dispute-resolution procedures - including mediation, fact-finding, and various forms of interest arbitration - are used to resolve public sector bargaining impasses. Unfortunately, limitations on the right to strike and the provision of alternative impasse resolution procedures may increase impasse occurrence by reducing their associated costs (Kochan & Baderschneider, 1978). Although much is known about the impact of impasse procedures on the collective bargaining process and outcomes (see Olson, 1988), industrial relations research largely ignores the impact of other important aspects of the negotiation process. Indeed, little is known about how the dynamics of the negotiation process or the bargaining behavior of the parties affect the likelihood of a bargaining impasse.

In this article, we describe developments in the assignment of negotiating responsibility within local public sector managements and investigate their importance to the collective bargaining process and outcomes. We also examine how characteristics of management negotiators and their bargaining strategies contribute to the successful resolution of contract negotiations. We then develop a model of the determinants of collective bargaining impasses that incorporates the role of chief negotiators in the bargaining process. We test hypotheses on plausible factors at work with data derived from a 1992 survey of municipal chief negotiators in the United States. We conclude with speculation on the implications of our findings.

WHO SERVES AS CHIEF NEGOTIATORS FOR MUNICIPALITIES?

Burton (1972) found that public sector management's organizational structure for collective bargaining changes as the bargaining relationship matures. When collective bargaining first begins in a city, bargaining responsibility is often assigned to the budget director, personnel director, or other staff officials. Because these officials are not professional labor negotiators, they often lack the expertise to compete effectively with professional union negotiators, and they often lack sufficient time to devote to labor relations matters. In addition, this arrangement does not resolve problems associated with the sharing of decision-making authority over employment-related issues among government officials. The fragmented authority structure that results requires that labor organizations negotiate with numerous city officials on various employment issues (Burton, 1972).

As municipalities gain experience in collective bargaining, authority over labor relations matters becomes more centralized in the executive branch (Burton, 1972). Furthermore, bargaining authority is commonly transferred from staff officers to labor relations specialists. According to Derber (1988), this transfer of authority takes two forms: Smaller cities come to rely on outside, ad hoc labor specialists, and larger cities add in-house labor specialists to their staffs.

Despite the supposed existence of these trends, surveys of cities' collective bargaining practices indicate considerable diversity in management's structural arrangements for collective bargaining (Chandler, 1989; Veglahn & Hayford, 1976). For instance, a 1988 survey of public sector labor-management relations indicates that municipalities most often assign chief negotiating responsibility to the city manager or chief administrative officer, an attorney retained by the city, or the personnel director (Chandler, 1989). However, the survey also finds that other government officials or outside labor specialists (e.g., mayor, budget director, department head, full-time labor professional, or consultant) occasionally serve as chief negotiator.(1)

Why do differences exist across municipalities in the assignment of chief negotiating responsibility? One possible explanation is that municipalities are at different stages in the labor-management relations life cycle. This would be consistent with Burton's (1972) suggestion that municipalities experiment with a variety of chief negotiator arrangements in the early years of collective bargaining, with gradual convergence to some modal type as the bargaining relationship matures. Alternatively, management practices' heterogeneity may be the rule with regard to organizational structures for collective bargaining. If true, decisions about who serves as chief negotiator may reflect political considerations of governmental decision makers and, thus, may be affected by the perceived benefits and costs of various organizational structures for collective bargaining (Gely & Chandler, 1993).

THE IMPACT OF CHIEF NEGOTIATORS ON THE LIKELIHOOD OF IMPASSE

Decisions by public sector managements and unions regarding the composition of their collective bargaining teams, especially who will serve as chief negotiator, have important implications. These decisions affect "the power of the focal organization with respect to the opposing organization" (Perry & Angle, 1979, p. 487), and because labor contracts are negotiated for extended periods of time, the costs of mistakes in contract negotiations can be rather high (Aldrich & Herker, 1977). In addition, and most important for this study, a chief negotiator can influence the level of conflict that exists in the collective bargaining process and, hence, the likelihood of a collective bargaining impasse. The effects of a chief negotiator on the collective bargaining process are related, in part, to a negotiator's position vis-a-vis the bargaining organization and the bargaining strategies the negotiator employs. Chief negotiators also possess a range of human capital characteristics and personality traits that can affect the collective bargaining process and their negotiated outcomes.

Organizational Position

According to Perry and Angle (1979), increasing the psychological distance of a chief negotiator from his or her constituents creates difficulties in negotiations. When psychological distance is large, constituents may become suspicious of the negotiator's organizational loyalty, and the chief negotiator may be less familiar with the goals of the organization he or she represents. Consequently, a negotiator who is distant from his or her organization may assume a hard-line stance with opponents for the purpose of impression management. These counterproductive displays of loyalty may increase the likelihood of impasse.(2)

A major determinant of psychological distance is the negotiator's position within the organizational hierarchy (i.e., his or her organizational centrality). As organizational centrality increases, psychological distance decreases. According to Perry and Angle (1979), "as the management negotiator's role is positioned higher up the organizational ladder, we would expect the role incumbent's interests to be focused more on the organization's central function than on the function of the organizational subunit" (p. 490). Therefore, they contend that organizational centrality is maximized for public management when the chief administrative officer represents the city in contract negotiations. Less central would be the personnel/human-resources director; less central yet would be a labor relations staff member, and the least central would be an outside consultant representing the city on an ad hoc basis.

From the standpoint of the union negotiator, organizational centrality is measured in terms of hierarchical level above the bargaining unit. "Thus, centralized bargaining, wherein the labor side is represented by a negotiator provided from higher union headquarters, results in lower organizational centrality in terms of the labor bargaining unit" (Perry & Angle, 1979, p. 491). The general practice

within public-employee unions is to decentralize decision making about collective bargaining to the local union level, vesting negotiating responsibility in municipal councils rather than national union representatives (Stern, 1988). This suggests minimal psychological distance between public-employee union chief negotiators and their constituents.(3)

Negotiator Behavior and Characteristics

According to most behavioral research on negotiations, impasses are significantly affected by a negotiator's bargaining strategies, a negotiator's experience and gender, and a negotiator's personality characteristics.

Bargaining strategy. Walton and McKersie (1965) put forth two contrasting models of the bargaining process. The distributive model, which views negotiations as a process of dividing a fixed amount of resources, and the integrative model, which views negotiations as a process involving trade-offs to solve problems that benefit both sides. Because of the zero-sum nature of distributive bargaining, its use should lead to more conflictual labor-management interactions and, consequently, a greater likelihood of a collective bargaining impasse. In contrast, the use of integrative bargaining should reduce the likelihood of a bargaining impasse.

Negotiator experience. In their examination of strike occurrence and duration, Reder and Neuman (1980) argued that strikes are more likely when the bargaining relationship is new or when protocols have not developed. From this, Montgomery and Benedict (1989) predict that a negotiator's experience should be an important determinant of the frequency and duration of strikes. Under conditions of uncertainty, which tend to characterize the negotiation process, "bargainers with more experience have better estimates of their opponents' true concession curves and are less likely to make forecast errors" (Montgomery & Benedict, 1989, p. 382).

Gender. Prior research suggests that women and men perceive conflict differently (e.g., Pinkley, 1990; Zechmeister & Druckman, 1973). Men are likely to be more concerned with winning or maximizing outcomes, whereas women are more concerned with maintaining a positive relationship with their opponent. If the desire to win decreases the likelihood of conceding in contract negotiations, a collective bargaining impasse should be more likely when men serve as chief negotiators.

Personality characteristics. Risk-taking behavior on the part of negotiators may affect the likelihood of impasse. Harnett, Cummings, and Hughes (1968) posited that "high risk takers are expected to be tenacious and yield a small amount from their initial position" (p. 96) and that this effect will be greatest under conditions of uncertainty. Similarly, Farber and Katz (1979) suggest that a risk-seeking orientation in collective bargaining should increase the likelihood of impasse and the use of arbitration. In contrast, risk-averse negotiators exhibit a greater willingness to make concessions to avoid an impasse (Bazerman, Magliozzi, & Neale, 1985; Neale & Bazerman, 1985; Neale, Huber, & Northcraft, 1987; Neale & Northcraft, 1986).

Two other relevant personality traits are positive and negative affectivity. Individuals high on positive affectivity tend to experience positive emotions, such as well-being, confidence, energy, gregariousness, and affiliation (Watson & Clark, 1992). Although it seems possible that individuals who project confidence would be more successful negotiators, it is also true that very positive individuals are more likely to engage in self-deception, such as an inflated view of oneself, unrealistic optimism, and an illusion of control. A negotiator with these latter tendencies would appear more likely to reach an

impasse in negotiations. Thus, positive affectivity may have a positive or negative effect on the probability of reaching an impasse.

In contrast to positive affectivity, individuals prone to experience negative affectivity are likely to be distressed and upset and to view themselves and the world around them negatively (Watson & Clark, 1984). Interestingly, the psychological literature has shown that negative individuals are more realistic in their judgments (Alloy & Abramson, 1979). For this reason, negotiators high in negative affectivity should have a lower probability of reaching a bargaining impasse than negotiators low in negative affectivity.

THE ROLE OF THE ENVIRONMENT

Much of the behavioral literature on negotiations relies on laboratory experiments and often uses college students. These studies avoid the difficulties associated with gaining access to actual negotiations and permit researchers to isolate specific determinants of negotiator behavior in a controlled environment. Unfortunately, the use of college students as experimental subjects may result in misleading findings because students differ in fundamental ways from actual labor negotiators.

Furthermore, because negotiations between unions and managements do not occur in a vacuum, the laboratory research ignores the contextual richness within which negotiations typically occur.⁽⁴⁾ As noted by Kochan and Baderschneider (1978), the probability of an impasse occurring in bargaining between a union and management is affected by the economic, political, and legal environments in which it occurs. However, because environmental factors affect the relative power of unions and managements in collective bargaining, often their effects cannot be predicted a priori. For example, whereas an inability to pay may increase management's resistance to union bargaining demands, it may also decrease union demands (Kochan & Baderschneider, 1978). Despite these difficulties, properly examining the impact of chief negotiators on bargaining impasses requires that we account for the external environment.

METHOD

Sample

Data on city characteristics were obtained from the U.S. Federal Bureau of Investigation's (1991) Uniform Crime Reports and the U.S. Bureau of the Census's (1982) Census of Governments. Data on police bargaining impasses, city chief negotiators, and negotiating strategies were collected via our 1992 survey of city chief negotiators.

A survey was conducted of city chief negotiators in every U.S. municipality having a population of 10,000 or more that was known to have a collective bargaining agreement with organized police in 1982.⁽⁵⁾ These cities were chosen to examine the bargaining practices of jurisdictions that had mature collective bargaining relationships with a municipal police union. However, unionization was fairly stable in police protection from 1982 to 1992; thus, our sample likely includes most cities that had collective bargaining agreements with organized police in 1992.

A total of 1,430 questionnaires were mailed, and 758 completed questionnaires were returned - a response rate of 53%. Unfortunately, we could not identify the city and state of 28 respondents, reducing the number of usable questionnaires to 730.

Dependent Variable

The dependent variable, IMPASSE, measures whether a city experienced a collective bargaining impasse during its most recent contract negotiations with a municipal police union (1 = yes). The dependent variable is regressed on four groups of variables.

Independent Variables

Structural-organizational sources of impasse. As previously indicated, the likelihood of a collective bargaining impasse increases with the psychological distance of a chief negotiator from his or her constituents. Because psychological distance depends largely on the organizational centrality of the chief negotiator (i.e., the more central, the less the psychological distance), his or her position within the government hierarchy should affect the likelihood of a bargaining impasse. If the chief negotiator holds a position at the top of the government hierarchy (e.g., city manager, assistant manager, mayor, or council member), the likelihood of impasse should be less than if the chief negotiator holds a staff position (e.g., personnel director, budget director, department head). Similarly, the probability of impasse should be less if the chief negotiator holds a staff position than if the chief negotiator is a full-time labor relations professional. Finally, impasses should be most likely to occur if the chief negotiator is an outsider hired to represent the city in contract negotiations with the police union (e.g., consultant or attorney retained by the city).

Three dummy variables are used to examine the impact of various organizational arrangements on the likelihood of a collective bargaining impasse. The variable TOPGOV measures whether the chief negotiator is the city manager, assistant manager, mayor, or council member (1 = yes); STAFF measures whether the chief negotiator is the personnel director, budget director, or department head (1 = yes); and LABORSPEC measures whether the chief negotiator is a labor specialist (1 = yes). The use of a consultant or attorney retained by the city as chief negotiator is the excluded category.

Bargaining strategies and history. Professional negotiators see no incompatibility in using both adversarial and cooperative forms of bargaining in the same set of negotiations (Feuille & Wheeler, 1981; Peterson & Tracy, 1981). Nonetheless, using more than one strategy simultaneously can be difficult due to various contradictions associated with them. Consequently, negotiators develop preferences for certain bargaining strategies when confronting conflict situations (Lewicki, Hiam, & Olander, 1996). Because of the win-lose dichotomy associated with distributive bargaining, its use will likely increase labor-management conflict. In contrast, if an integrative bargaining strategy dominates, labor-management conflict is less likely to be in evidence.

Seven items examined the extent to which chief negotiators employed distributive bargaining tactics. Respondents were asked how often they (a) imposed time pressure on the other party; (b) presented an image (whether real or not) of holding firm to the other party; (c) reduced the other party's resistance through persuasive arguments, promises, or threats; (d) concealed information from the other party; (e) made a token concession or provided a signal to increase the probability of an acceptable agreement; (f) attempted to reach an agreement on lesser issues first in hopes of increasing the chance of settling the big ones; and (g) exaggerated their position to reach a more favorable outcome. To examine the extent to which chief negotiators employed integrative bargaining tactics, respondents were asked how often they engaged in the following tactics: (a) tried to build the case for an agreement by selling the other party on the merits of an agreement, (b) tried to facilitate the negotiation process by improving the mood of the other party, (c) engaged in mutual problem solving with the other party, and (d) tried to

arrive at new solutions that satisfy both parties. For each of the 11 items used to assess bargaining strategy, there were 6 possible responses, ranging from 1 (never) to 6 (very often).(6)

Two scales (DISTRIB, INTEGRAT) were created to represent the distributive and integrative bargaining strategies. The scales ranged in value from 1 (indicative of infrequent use of the strategy) to 6 (indicative of frequent use of the strategy). The DISTRIB and INTEGRAT scales have coefficient alphas of .60 and .65, respectively.

To determine whether bargaining history, namely, the previous use of arbitration, affected the likelihood of impasse, the variable PREARB was included in the analysis. PREARB is a dummy variable that is equal to 1 if arbitration had been used to resolve an impasse in prior negotiations. The nature of the effect of previous arbitration use cannot be determined a priori because it depends on the parties' prior experiences with the procedure. If the parties to negotiations find that they prefer arbitration to settling disputes on their own, a positive narcotic effect may occur, leading to increased subsequent use of arbitration. In contrast, a negative experience with arbitration may decrease its use in subsequent negotiations (i.e., a negative narcotic effect).

Personal characteristics of chief negotiator. As indicated, gender and experience are believed to be important determinants of bargaining outcomes. Consequently, a dummy variable, GENDER, was created for gender (1 for respondents who are female) as was a variable measuring the number of years of negotiating experience possessed by the management chief negotiator (EXP).

Risk aversion (RISK) was measured using two items ([Alpha] = .74), which asked respondents how much they agreed with the following statements: (a) "I always play it safe, even if it means occasionally losing out on a good opportunity" and (b) "I am a cautious person who generally avoids risks."

Positive and negative affectivity were measured with the Positive and Negative Affect Schedules (PANAS) (Watson, Clark, & Tellegen, 1988). The PANAS assesses both positive affect (PA) and negative affect (NA) by asking the respondents to indicate how often they generally experience 10 positive and 10 negative emotions (e.g., determined, enthusiastic, jittery, afraid). Respondents indicate the degree to which they tend to feel these emotions using a Likert-type scale ranging from 1 (very slightly or not at all) to 5 (very much).

Environmental contexts. A city's ability to pay is measured by per capita municipal debt (DEBT). In addition, local demand for police protection is accounted for using the local crime rate (CRIME). The percentage of private sector workers in the state who are unionized (PCTUNION) is included as a proxy for the favorableness of the political environment toward unions. Because these environmental factors may have opposite effects on unions' and managements' bargaining incentives, their effects on the likelihood of a bargaining impasse cannot be predicted a priori.

The variable ARBLAW, which measures whether a state law or city ordinance mandates interest arbitration as the terminal step in impasse resolution, is included to account for the impasse-resolution process's legal environment. Arbitration's availability may reduce the incentive to negotiate settlements because impasse costs under arbitration are low, relative to strikes. Moreover, union and government negotiators may view arbitration as a politically safe mechanism that enables them to transfer responsibility for undesirable bargaining outcomes to a neutral third party who is unaccountable to constituents. Reductions in the incentive to bargain will fail to occur only if one or both parties are risk averse to the arbitrator's decision.

There is also evidence that union-management negotiations are more likely to be resolved with outside assistance in larger cities than in smaller cities (Kochan & Baderschneider, 1978). Thus, municipal population (POP) should be positively associated with the likelihood of impasse. Finally, year dummy variables (YEAR90, YEAR91-92; 1989 is the excluded category) control for the year that negotiations occurred. This accounts for the effects of year-specific conditions on the likelihood of impasse.

POLICE BARGAINING IMPASSES, CHIEF NEGOTIATORS, AND BARGAINING STRATEGIES

Table 1 provides a description of bargaining impasses and municipal chief negotiators. According to the 1992 survey results, 40% of cities had experienced an impasse in their most recent negotiations with police. Of these, only 10% [TABULAR DATA FOR TABLE 1 OMITTED] indicated that the impasse was resolved without third-party assistance. Chief negotiators, who confronted an impasse in the most recent round of contract negotiations, reported that mediation was the most frequently used form of impasse resolution (71%), followed by arbitration (36%) and fact-finding (13%). Of the cities that experienced an impasse with a police organization, 14% used a combination of these procedures.

The survey results also show that chief negotiators are most likely to be top government officials (55.9%), followed by staff officials (29.3%). The negotiators are, on average, about 46 years old, male (84.9%), and married (83.8%); they possess approximately 17.5 years of education and report an average of 13 years of experience negotiating labor-management agreements.

EMPIRICAL MODEL AND ESTIMATION

Drawing from the above discussion, the probability of impasse equation can be written as

$$\text{IMPASSE} = f(\text{TOPGOV}, \text{STAFF}, \text{LABORSPEC}, \text{GENDER}, \text{EXP}, \text{RISK}, \text{PA}, \text{NA}, \text{DISTRIB}, \text{INTEGRAT}, \text{PREARB}, \text{DEBT}, \text{CRIME}, \text{PCTUNION}, \text{ARBLAW}, \text{POP}, \text{YEAR90}, \text{YEAR91-92}) + e.$$

The appendix provides a description of the variables and their means and standard deviations. Because the dependent variable is dichotomous, logit analysis was used to estimate the equation (Hanushek & Jackson, 1977).

The sample is limited to those respondents who indicated that the city had a collective bargaining agreement with the police union at the time of the survey and who indicated that they served as chief negotiator in the most recent negotiations with the police union. Complete survey data are available on 534 such respondents. Missing data for some of the environmental variables reduces the sample when those variables are included in the analysis.

Table 2 contains estimates from the IMPASSE equation. The first step in the analysis is to test hypotheses related to the impact on bargaining impasses of a chief negotiator's position vis-a-vis the bargaining organization. Variables associated with the bargaining relationship are added in the second step. As described earlier, using a chief negotiator who is less centrally located within the organizational hierarchy is predicted to increase the likelihood of a bargaining impasse because the negotiator will be inclined to take a hard-line stance with the union to prove loyalty to the organization. If this is correct, controlling for aspects of the bargaining relationship should diminish the association between a negotiator's organizational position and the likelihood of impasse. The third step is to include variables probing the personal characteristics of chief negotiators. Finally, in the fourth step, we include measures of the external environment. This four-step modeling procedure allows us to assess the relative

contributions of the various factors that are thought to influence collective bargaining impasses and to observe shifts in specific coefficients as terms are added to the equation.

Coefficients in Model 1 lend support for the importance of chief negotiators' positions vis-a-vis the bargaining organization as determinants of collective bargaining impasses. As predicted, compared to the use of a consultant or attorney retained by the city, bargaining impasses are much less likely to occur when a top government official (e.g., city manager, assistant manager, mayor, or council member) or a staff officer (e.g., personnel director, budget director, or department head) serves as chief negotiator. However, the Model 1 results indicate that there is not a significant reduction in the likelihood of a collective bargaining impasse when a full-time labor relations professional is employed as chief negotiator. Additional tests for significant differences between coefficients [TABULAR DATA FOR TABLE 2 OMITTED] in Model 1 reveal that using either a top government official or staff official as chief negotiator significantly decreases the likelihood of an impasse, relative to using a full-time labor relations professional. However, there is not a significant difference in impasse occurrence between having a top government official rather than a staff official as chief negotiator.(7)

Including variables related to the bargaining relationship between a municipality and a police organization reveals several significant relationships and substantially improves the fit of the model ($-2 \times \text{Log Likelihood Ratio} = 33.332$, p [less than] .01). First, reliance on a distributive bargaining strategy by the municipal chief negotiator significantly increases the likelihood of impasse, whereas reliance on an integrative strategy significantly reduces the likelihood of impasse. Second, prior use of arbitration increases the likelihood of an impasse, perhaps suggesting the existence of positive narcotic effects.

The Model 2 results also show that controlling for aspects of the bargaining relationship does not significantly reduce the coefficients for the variables representing a chief negotiator's position vis-a-vis the organization. Therefore, these results fail to support the contention that a chief negotiator's organizational position affects bargaining outcomes through the bargaining approach/relationship he or she adopts with the bargaining opponent.

Model 3 shows that including the chief negotiator characteristics covariates does not improve the fit of the model ($-2 \times \text{Log Likelihood Ratio} = 9.812$, p [less than] .10). However, negative affectivity significantly reduces the likelihood of a collective bargaining impasse. Perhaps the more realistic judgments associated with this personality trait improve a negotiator's ability to evaluate bargaining proposals and formulate reasonable bargaining demands. The lack of significant effects for the personality variables is surprising in light of Walton and McKersie's (1965) assertion that personality characteristics affect how negotiators approach problem solving. However, the results are consistent with prior research that finds little support for the importance of personality variables to negotiations (see Thompson, 1990, for a review of this literature).

The last column of results (Model 4) consists of the Model 3 variables in addition to the environmental factors. The addition of the environment variables results in another significant increment in the explanatory power of the model ($-2 \times \text{Log Likelihood Ratio} = 24.902$, p [less than] .01).(8) However, only two of the variables significantly affect the likelihood of a collective bargaining impasse. According to these results, the presence of a compulsory interest arbitration procedure significantly increases the likelihood of a bargaining impasse. This finding is consistent with criticisms that arbitration's availability chills the negotiations process. The results also indicate that collective bargaining impasses were more likely in negotiations that occurred in 1991 or 1992, compared to those that occurred in 1989. Finally, including the environmental factors in the analysis does not alter the substantive findings of Model 3,

with the notable exception being the effect of staff representatives (STAFF), which becomes nonsignificant.(9)

SUMMARY AND CONCLUSION

We have presented a systematic empirical analysis of the determinants of collective bargaining impasses involving local municipal governments and police unions using data from a unique 1992 survey of municipal chief negotiators. In contrast to past research examining the negotiation process, which relies heavily on laboratory studies of college students, we use data from actual negotiators. The results of this study should be both of theoretical and practical interest.

From a theoretical perspective, the study examines the relationship between a variety of types of variables related to chief negotiators, their role in the collective bargaining process, and collective bargaining impasses. We find that the organizational position of a chief negotiator is significantly associated with the likelihood of a bargaining impasse. This is consistent with prior research that suggests that the organizational centrality of a chief negotiator should affect bargaining outcomes. However, our results do not support the notion that these effects exist because a chief negotiator's organizational position is differentially related to bargaining strategies and history.

What then explains the effects of organizational position on bargaining impasses? It may be that chief negotiators who possess more organizational centrality are granted greater authority to make crucial decisions in collective bargaining, thus simplifying the process. In contrast, where outside labor consultants serve as chief negotiators, public-employee unions may be more inclined to make end runs to higher government officials whom they perceive as having more influence over ultimate outcomes. As such activity occurs away from the bargaining table, negotiations become more difficult to resolve. A second possibility is that municipalities that have had less complex negotiations might be inclined to assign negotiating responsibility to a municipal staff person or top government official, whereas municipalities that have more complex negotiations might be more likely to rely on a labor specialist or an outside hired gun (Gely & Chandler, 1993). Consequently, the relationship between organizational position and the likelihood of a collective bargaining impasse may simply be a manifestation of the conditions that led to the assignment of chief negotiating responsibility.

In addition, our results indicate that bargaining strategies and history are important determinants of collective bargaining impasses. Collective bargaining generally leads to the establishment of an ongoing relationship between unions and managements (and, hence, between their primary representatives). As is true of other forms of human interaction, what has occurred during past exchanges, as well as what is occurring presently, significantly affects the nature of the interaction. Indeed, past collective bargaining experiences and the bargaining strategies employed by a chief negotiator appear to be more important determinants of impasses than are the personal characteristics of the chief negotiator or the bargaining environment in which he or she operates. In short, what one does, or has done, is more important to the negotiation process than who you are or the environment in which one operates.

Finally, the results demonstrate that assignment of chief negotiating responsibility has practical implications for public sector managements. Using the Model 3 results, it is possible to estimate the impact of the independent variables on the probability of an impasse.(10) Compared to the use of a consultant or an attorney retained by the city, these estimates indicate that the likelihood of a collective bargaining impasse decreases by 16 percentage points if the chief negotiator is a top government official and by 15 percentage points if the chief negotiator is a staff official. Similarly, chief negotiators who

frequently employ an integrative bargaining strategy decrease the likelihood of an impasse by 14 percentage points, and those scoring high in negative affectivity decrease the likelihood of a bargaining impasse by 29 percentage points. In contrast, chief negotiators who frequently use a distributive bargaining strategy increase the likelihood of impasse by 25 percentage points, and prior use of arbitration increases the likelihood of a bargaining impasse by 21 percentage points.

In sum, although government officials can do little to affect the collective bargaining environment, they can affect the collective bargaining process and outcomes through their assignment of chief negotiators. In addition, municipalities concerned with improving their collective bargaining self-resolution track record might consider providing training to chief negotiators in the use of integrative bargaining strategies.

APPENDIX

Variables Used in the Analysis of Bargaining Impasses and Their Means and Standard Deviations

Variable Definition

Dependent variable

IMPASSE A dichotomous variable equal to 1 if a city experienced a collective bargaining impasse during its most recent contract negotiations with a municipal police union (M = .395, SD = .489)

Independent variables

ARBLAW A dummy variable equal to 1 if the municipality is covered by a compulsory procedure that mandates arbitration to resolve negotiating impasses (M = .703, SD = .457, N = 404)

CRIME The local crime index total for 1990 (M = 5317.05, SD = 12630.09, N = 404)

DEBT Per capita municipal debt in 1987 (M = 811.26, SD = 856.79, N = 404)

DISTRIB A composite variable composed of six measures ([Alpha] = .60) that are assessed on a 6-point scale ranging from 1 (never) to 6 (very often). Negotiators were asked how often they (a) imposed time pressure on the other party; (b) presented an image (whether real or not) of holding firm to the other party; (c) reduced the other party's resistance through persuasive arguments, promises, or threats; (d) concealed information from the other party; (e) made a token concession or provided a signal to increase the probability of an acceptable agreement; (f) exaggerated their position to reach a more favorable outcome (M = 3.78, SD = .605)

EXP The number of years of negotiating experience possessed by the management chief negotiator (M = 12.60, SD = 7.30)

GENDER A dummy variable equal to 1 if the chief negotiator is female (M = .144, SD = .352)

INTEGRAT A composite variable composed of four measures ([Alpha] = .64) that are assessed on a 6-point scale ranging from 1 (never) to 6 (very often). Negotiators were asked how often they (a) tried to build a case for an agreement by selling the other party on the merits of an agreement, (b) tried to facilitate the negotiation process by improving the mood of the other party, (c) engaged in mutual problem solving with the other party, and (d) tried to arrive at new solutions that satisfy both parties (M = 4.53, SD = .672)

LABORSPEC A dummy variable equal to 1 if the chief negotiator is

a full-time labor relations professional (M = .060, SD = .238)

NA A composite variable composed of 10 items ([Alpha] = .83) that are assessed on a scale ranging from 1 (very slightly or not at all) to 5 (very much). Negotiators were asked how often they experienced the following feelings and emotions: distressed, upset, guilty, scared, hostile, irritable, ashamed, nervous, jittery, and afraid (M = 1.62, SD = .45)

PA A composite variable composed of 10 items ([Alpha] = .81) that are assessed on a scale ranging from 1 (very slightly or not at all) to 5 (very much). Negotiators were asked how often they experienced the following feelings and emotions: interested, excited, strong, enthusiastic, proud, alert, inspired, determined, attentive, and active (M = 3.89, SD = .47)

PCTUNION The percentage of the state's workforce that was unionized in 1988 (M = 18.36, SD = 6.44, N = 404)

POP 1990 municipal population (M = 67203.79, SD = 123080.60, N = 404)

PREARB A dummy variable equal to 1 if arbitration had been used to resolve a collective bargaining impasse in prior negotiations (M = .395, SD = .489)

RISK A composite variable composed of two measures ([Alpha] = .74) that are assessed on a scale ranging from 1 (totally disagree) to 7 (totally agree). Chief negotiators responded to the following statements: (a) "I always play it safe, even if it means occasionally losing out on a good opportunity" and (b) "I am a cautious person who generally avoids risk" (M = 3.34, SD = 1.29)

STAFF A dummy variable equal to 1 if the chief negotiator holds a staff level position within the government hierarchy (e.g., personnel director, budget director, department head) (M = .228, SD = .420)

TOPGOV A dummy variable equal to 1 if the chief negotiator holds a position at the top of the government hierarchy (e.g., city manager, assistant city manager, mayor, council member) (M = .564, SD = .496)

YEAR90, YEAR 91-92 Year dummy variables representing the year in which contract negotiations last occurred between the municipality and the police organization (YEAR90: M = .205, SD = .404, N = 404; YEAR91-92: M = .730, SD = .444, N = 404)

SOURCE: Data for IMPASSE, ARBLAW, DISTRIB, EXP, GENDER, INTEGRAT, LABORSPEC, PREARB, RISK, STAFF, TOPGOV, YEAR90, and YEAR91-92 were obtained from the Chief Negotiator Survey (Judge & Chandler, 1992); definitions for CRIME and POP were taken from the U.S. Federal

Bureau of Investigation (1991); the definition for DEBT was taken from the U.S. Bureau of the Census (1990); and the definition for PCTUNION was taken from Curme, Hirsch, and Macpherson (1990).
NOTE: N = 534, unless otherwise noted.

NOTES

1. These findings support Derber's (1988) contention that large cities are more likely to use in-house labor specialists, whereas small cities are more likely to hire labor specialists on an as-needed basis.
2. To the extent that one's position in the organization affects his or her power, Perry and Angle's (1979) predictions are consistent with those put forth by Jackson and King (1983), who posit that "a boundary spanning person who has power over the constituents will be relatively insulated from censure regarding negotiation outcomes and processes and thus has freedom to negotiate in a flexible manner" (p. 180).
3. In contrast, private sector national unions typically control the collective bargaining process.
4. Both of these limitations raise questions about the external validity of findings from laboratory research. For a full discussion of external and internal validity problems associated with laboratory research, see Gordon, Schmitt, and Schneider, 1984.
5. The cities were identified using data from the 1982 Census of Governments (U.S. Bureau of the Census, 1982).
6. The scale values were 1 (never), 2 (almost never), 3 (not very often), 4 (sometimes), 5 (quite a bit), and 6 (very often).

7. To test for significant differences between coefficients, the following equation was used:

$$t = \frac{[b.sub.1] - [b.sub.2]}{[\text{var}([b.sub.1]) + \text{var}([b.sub.2]) - 2\text{cov}([b.sub.1], [b.sub.2])].sup.1/2}$$

Testing for significant differences between TOPGOV and LABORSPEC and between STAFF and LABORSPEC yielded t values of 2.53 (p [less than] .05) and 2.43 (p [less than] .05), respectively.

8. To test whether adding the environmental variables significantly improved the explanatory power of the model, Model 3 was re-estimated with the sample size constrained to the 404 observations available when estimating Model 4. This yielded a -2 x Log Likelihood Ratio of 43.920 for Model 3. The full results are available on request from the first author.
9. Examination of the correlation matrix (not shown) does not reveal a high correlation between STAFF and any of the environmental factors. Rather, the nonsignificance of STAFF in Model 4 appears to be caused by the loss of observations from the sample.

10. The probability effects were estimated using the following equation:

$$P = 1/(1 + [e.sup.-XB])$$

To estimate the effects of TOPGOV and STAFF, we first estimated the probability of an impasse if a consultant or attorney retained by the city served as chief negotiator. This was done by setting TOPGOV, STAFF, and LABORSPEC to zero and all other variables at their mean values. The resulting probability value was then compared to the probability obtained when TOPGOV was equal to 1 (or STAFF = 1). The effects of bargaining strategies and negative affectivity were estimated by comparing the predicted probability of an impasse estimated at the mean values of all independent variables with the predicted

probability obtained when DISTRIB was equal to 6 (or INTEGRAT = 6 or NA = 5) and all other variables assumed their mean values. The effects of PREARB were calculated by comparing the estimated probability of a collective bargaining impasse when PREARB was equal to zero, with the estimated probability of a collective bargaining impasse when PREARB equaled 1 and all other variables were set to equal their mean values.

AUTHORS' NOTE: The authors thank Chris Parker and Deanna Ross for their excellent research assistance, Cornell University for its generous research support, and the International City Management Association for sponsoring this research. This article was accepted for publication in January 1998.

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