

**SHOULD “NIGHT BASEBALL” ARBITRATION BE
USED IN LIEU OF PUBLIC SECTOR STRIKES?
PSYCHOLOGICAL CONSIDERATIONS AND
SUGGESTIONS FOR RESEARCH**

WILLIAM H. ROSS, PH.D.
University of Wisconsin–La Crosse

ABSTRACT

“Night Baseball” (NB) arbitration is a variant on final-offer interest arbitration (FOA) where the arbitrator cannot fashion his/her own settlement, but must pick one side’s proposals. Unlike FOA, disputants do not present specific proposals at the NB arbitration hearing, but instead present only evidence and testimony; their final offers are sealed and unknown to both the opponent and the arbitrator. After fashioning a nonbinding opinion, the arbitrator compares his/her opinion to the proposals and selects a winner. Should NB arbitration be used in public sector labor relations as an alternative to public sector strikes? Prior to making a recommendation, research on the psychological dynamics of NB arbitration is needed. The dynamics that must be considered to evaluate NB arbitration include: 1) the effects of the procedure on each party’s pre-arbitration bargaining strategy and arbitration proposal strategy, 2) the process of arbitrator decision making, 3) the processes that arbitrators use when comparing proposals to their own decision, 4) ethical issues, and 5) procedural justice considerations.

Lawmakers in most states in the United States have been unwilling to grant public sector employees the right to strike [1]. Instead, lawmakers have embraced a variety of third-party procedures to resolve negotiation impasses [2-3]. Of these, perhaps the most widespread is binding conventional interest arbitration, where a neutral third party hears labor and management contract proposals pertaining

to unresolved issues and then determines what the content of the contract for those issues will be. While similar in many ways to a court hearing, “discovery” and other procedural aspects of court proceedings are often limited, and there is usually only a very limited right to appeal [4-5].

Conventional arbitration (CA) has often been criticized. It is sometimes argued that arbitrators tend to “split the difference” between each side’s positions, prompting each side to resist making concessions in the bargaining that precedes arbitration (this resistance is sometimes called the “chilling” or “freezing” effect). The chilling effect is characterized by both a higher rate of bargaining impasses and by each party’s taking a more extreme position in its arbitration proposals [6-10].¹

In an attempt to prevent the alleged problems associated with conventional arbitration, some jurisdictions use final-offer arbitration (FOA), where the third party must select either the union’s final offer or the management’s final offer and the third party cannot fashion his or her own settlement [2]. The rationale behind FOA is that without a “split-the-difference” option, the parties encounter greater risk and uncertainty by using arbitration and will be more motivated to adopt reasonable positions and settle on their own [18-19]. FOA is sometimes called “baseball arbitration” because it is used for salary adjustments in major league baseball [20-21]. When multiple issues are unresolved, FOA may be either conducted on an “issue-by-issue” basis, where the arbitrator resolves each issue individually, or “by package,” where the arbitrator rules for one side’s complete set of proposals [4, 22].

The evidence on FOA is mixed, with some studies showing that, indeed, the procedure reduces the “chilling effect” [23]. Stokes [24] suggested that FOA reduces the chilling effect; he noted that, in 1995, when New Jersey used FOA, the average “spread” between union and municipality wage and benefit offers in arbitration was 29 percent for firefighters [24]. In 1996 the state switched to CA. In 1997, the first full year of CA, the spread rose to 44 percent. These data suggest that the parties made more similar offers under a FOA procedure than under CA. In his review of the literature, Hebdon concluded that the voluntary settlement rate was about 75 percent when the parties anticipated using

¹ Do arbitrators tend to split the difference between the two sides’ offers? Numerous studies have investigated this aspect of arbitrator decision making. Field research suggests that arbitrators using CA do attend to the parties’ offers (e.g., [11-12]). Controlled, scenario-research experiments (typically involving only one or a few issues) suggest that arbitrator decision making is more complex than simply “splitting the difference” between the parties’ offers. Instead, arbitrators tend to rely heavily upon their own notions of equity. These studies also suggest that arbitrator decisions are based predominantly on the facts (e.g., the inflation rate for a wage raise dispute) and evidence presented by the parties (e.g., what “comparable groups” are receiving for raises, how other arbitrators have decided “similar cases”). In these experimental studies, arbitrators rely to a lesser extent on the parties’ formal offers; arbitrator individual differences (e.g., the arbitrator’s prior experience) also have modest effects [13-17].

conventional arbitration versus 89 percent when negotiators anticipated using final-offer arbitration [2]. However, other studies suggested that the FOA procedure is not significantly better than CA at reducing the chilling effect and at encouraging the parties to settle disputes on their own [25-26].

NIGHT BASEBALL ARBITRATION: A DESCRIPTION

During the last dozen years, a new variation in FOA has emerged as an option for private-sector business disputes (e.g., insurance claims) offered by alternative dispute resolution (ADR) firms. Known as “night baseball” (NB) arbitration [27], the parties do not present specific proposals at the arbitration hearing (as they usually do with regular FOA). Rather, each side’s final offer is presented in a sealed envelope. Testimony from witnesses and evidence presented by each side may support that side’s general position and even point to each side’s specific preferred resolution to the dispute. However, the arbitrator is free to decide the issues on their merits “without being influenced by the parties’ demands” [28, p. 19]. The arbitrator considers the evidence, writes a nonbinding opinion (ruling), and then opens the two sides’ envelopes. The arbitrator endorses the proposal that is closest to the arbitrator’s opinion. Like FOA, it is the party’s proposal—not an arbitrator-crafted solution—that provides a binding resolution to the dispute. The process of NB arbitration is portrayed in Figure 1.

Should lawmakers consider NB arbitration as a viable procedure for resolving public sector labor disputes? Before endorsing NB arbitration through legislation, I believe that lawmakers should be informed by research.² And as I could uncover no published research dealing with this procedure, I thought it instructive to consider what types of research should be conducted to properly assess the NB form of arbitration.

Night baseball arbitration shares some characteristics with both FOA and CA. The procedure also introduces some additional psychological dynamics into a FOA procedure. I believe that the psychological dynamics that must be considered to evaluate NB arbitration deal with several areas. Specifically, these are: 1) the effects of this procedure on each party’s pre-arbitration bargaining strategy and arbitration proposal strategy, 2) the process of arbitrator decision making, 3) the processes that arbitrators use when comparing disputant proposals to their own (ideal) decision, 4) the ethical and psychological issues surrounding how an arbitrator might respond to one side revealing its specific position during the hearing, and 5) procedural and distributive justice considerations of the procedure by both the parties and by arbitrators. Each of these areas is considered below.

² For a discussion of the dynamic relationship between the research findings of social science and decisions made by government entities, see Rosenblum [29].

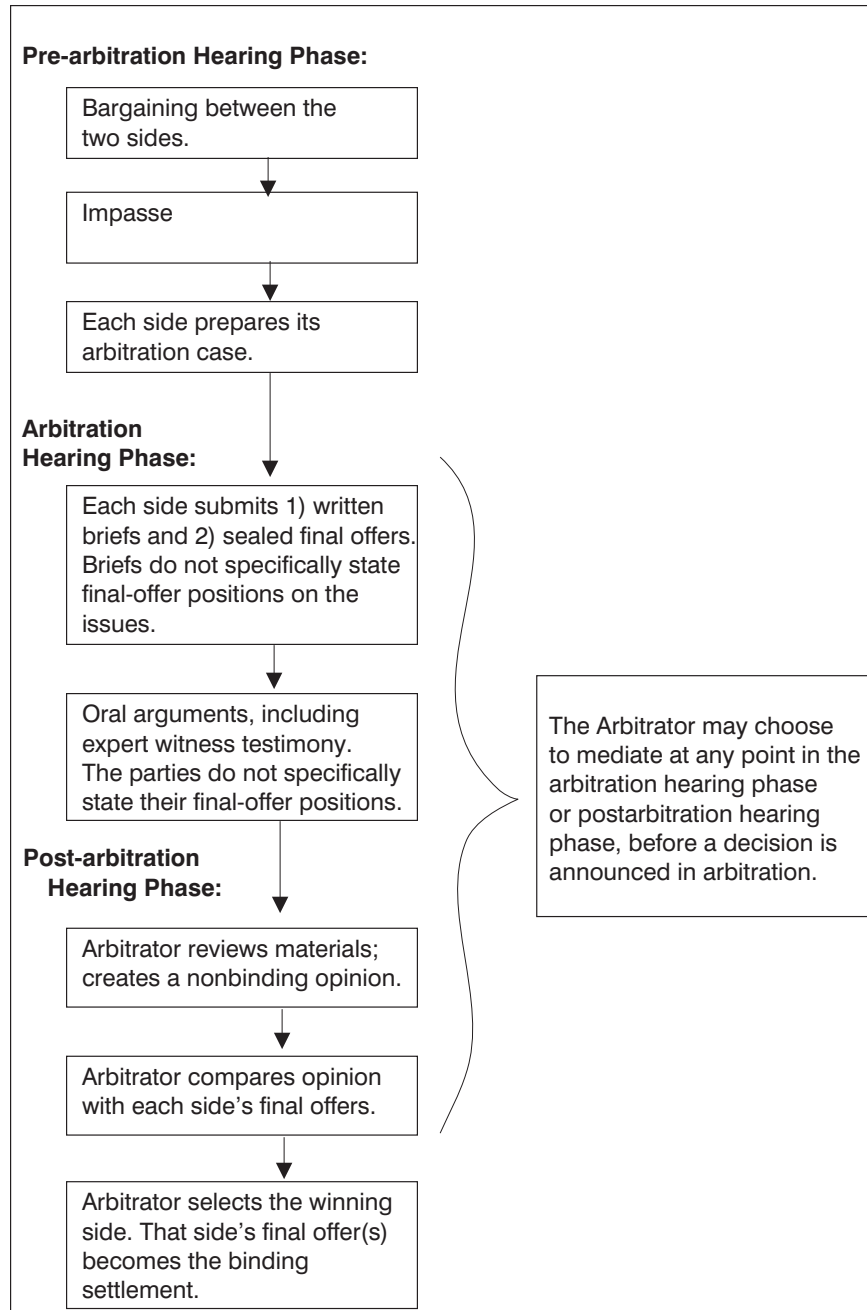


Figure 1. The typical night baseball arbitration process.

EFFECTS ON EACH PARTY'S BARGAINING AND ARBITRATION STRATEGY

Effects on Bargaining Strategy

At first glance, it seems that the effects of night baseball arbitration on bargaining strategy will be similar to the effects of final-offer arbitration. This is because of the similarity of the two procedures. One supposed advantage of FOA is that negotiators who know that FOA follows bargaining will make more concessions and take moderate (“convergent”), rather than divergent, final positions on issues.³

What NB arbitration adds to this equation is heightened negotiator uncertainty. This uncertainty may result in conflicting and opposite psychological effects. First, added uncertainty about what the opponent will accept may lead to greater issue exploration and discussion in the bargaining that precedes the arbitration hearing (or even after the hearing has been held but before the verdict is rendered). This exploration process may result in fewer impasses and more integrative agreements (see Lewicki, Barry, Saunders, and Minton [33] for a general discussion). Babcock described data supporting this proposition [34]. She reported that when the current wage level differs markedly from the average (greatly increasing the uncertainty as to how the arbitrator will rule in FOA) the parties are more likely to settle the dispute and avoid an impasse. If one party is more risk-averse than the other, the tendency to settle may be heightened by the additional uncertainty that NB arbitration creates; the net result should be that the risk-averse party will make more generous offers, resulting in an agreement [31]. This logic suggests that the uncertainty introduced with NB arbitration promotes voluntary settlement.

Second, this uncertainty may lead to more tactical errors when bargaining. Typically, one side will make a “final offer” in bargaining that, if rejected by the other side, will send the dispute into arbitration. A bargaining team does not know whether the opponent’s “final offer” in bargaining is the same “final offer” that the opponent will propose in arbitration, or whether it is a “bluff” designed to secure a more favorable outcome. This type of bluff is a possibility for bargaining preceding any form of interest arbitration. However, in other types of arbitration, it is soon apparent to both sides whether each side presents the same “final offers” to the arbitrator as were presented earlier to the opponent in bargaining. With NB arbitration, the opponent’s offers are not revealed to the other side at the time they are given to the arbitrator. Therefore, the opponent’s bargaining “final offer” is discovered to be a “bluff” only if the opponent wins with a different, more generous, “final offer” in subsequent arbitration. If the opponent attempted a bluff in bargaining, made a more generous offer in arbitration, but then lost in

³ However, others suggest that this is less likely than first thought [16, 30-32].

arbitration, the opponent's arbitration offer, and thus his/her bargaining strategy, is not revealed. This means that each negotiator may learn less about the other side's trustworthiness as a bargaining partner with the NB arbitration procedure.

Research further suggests that disputants are often overconfident in uncertain situations, and they are unrealistically optimistic that they will obtain favorable outcomes [26, 35-36]. This combination of uncertainty and negotiator optimism is likely to result in more errors in bargaining where one side rejects the other's "final-offer" proposal, thinking that the other side will subsequently make a better offer. While this dynamic exists to some degree in all bargaining situations, it may be more likely when it precedes NB arbitration, where the opposing side's proposal is unknown. In addition to rationalizing that the arbitrator will find his/her own proposal more reasonable than the opponent's proposal, the party may also be overconfident that the opponent will present an unrealistic proposal.

Some negotiators may wish to reduce this last type of uncertainty by trying to identify the opponent's actual final offers. Therefore, one might expect some negotiators on each side to attempt to extract the maximum concessions from the other side prior to going to arbitration (perhaps by employing contending tactics [37]), to reduce the uncertainty of what it feels the other will propose in arbitration. Tactics aimed at extracting maximum concessions often fail, sometimes because of psychological phenomena such as reactive devaluation (where a negotiator underestimates the value of opponent concessions) and sometimes because contending tactics create hostility between the negotiators [38]. Thus, negotiator optimism, coupled with a desire to reduce the uncertainty of what the other side will offer, may result in more impasses when the parties anticipate using NB arbitration.

Effects on Arbitration Strategy

With FOA, each side pursues a strategy of attempting to convince the arbitrator that its proposals are more reasonable than the other side's proposals. Each side does not need to convince the arbitrator that its proposals are necessarily squarely within a range of common outcomes—only that its proposals are less extreme than the other side's proposals or that it is making wage and benefit comparisons with "more appropriate" groups (e.g., other public-sector workers in the same county) than is the opposing side [39].

With NB arbitration, the parties do not reveal their desired outcomes precisely in the arbitration hearing, nor do they know the other side's exact proposals. Rather, each side seeks to persuade the arbitrator to adopt a position that is close to its own unspoken position on the issues. How can this be done if the party cannot suggest a specific settlement?

The advocate for a particular side might seek to convince the arbitrator that there is a "typical" approach to settling each unresolved issue. For example, suppose that the union president wants a 4 percent annual pay raise from a

municipality. The advocate for the union might demonstrate that recent annual pay raises given by “comparable” communities in the state follow a normal distribution with a mean of 4 percent and a standard deviation of 1 percent. Such an approach is an attempt to lead the arbitrator to conclude that a 4 percent pay raise is quite reasonable in an “absolute” sense, given the population of settlements of comparable communities. The advocate must adopt this strategy because, in the absence of information about the other side’s proposal, it cannot merely rely on being reasonable in a “relative” sense: that is, “we are offering a more reasonable proposal than the other side is proposing.”

Further, because each side is not allowed to reveal its exact proposal in its testimony and briefs, it must instead present evidence that guides the arbitrator to the proposal the party is seeking. The arbitrator must draw his or her own conclusion that the average reasonable solution is a particular value that later happens to be what that side proposed. This may result in one side’s offering testimony favoring a range of outcomes—the mean (or median) of which equals the value of its sealed proposal.

However, the opposing side may follow a similar strategy. For example, suppose the municipality wants the pay raise to be only 1.5 percent. Its attorney may present evidence showing that recent wage settlements (among what the HR manager views as “comparable” communities) are normally distributed with a mean pay raise of 1.5 percent and a standard deviation of only .5 percent. The HR manager is attempting to persuade the arbitrator that a pay raise of 1.5 percent is reasonable, without ever stating that this is the value that s/he prefers. If both sides follow this strategy, evidence for various outcomes on an issue in a labor dispute will resemble a bimodal distribution for each issue in dispute, with one mean favoring the management position (here, 1.5%) and the other mean favoring the union position (here, 4%).

The research on “persuasion” and “impression management” offers much for advocates attempting to persuade arbitrators of the correctness of their positions [40-41]. Impression-management tactics have been shown to influence grievance arbitrator decision making, and impression-management tactics may have effects on interest arbitrators as well [42]. While persuasion techniques are used in any arbitration effort, the use of a wider variety of persuasion techniques (including emotional appeals, see [43-44]) may be more frequent due to the uncertainty as to what the other side’s position will be. Thus, one might expect, for example, to see more reliance on “expert” and “disinterested” witnesses with this type of arbitration, as these factors are thought to enhance witness credibility and consequently enhance the persuasive power of their message [45-46]. Whether this is indeed the case, and, if so, whether it is an effective strategy, warrants empirical investigation.

There are also some parallels between the FOA and the NB arbitration distinction and research in social psychology about whether it is better to draw conclusions for the audience or allow the audience to draw its own conclusion.

With the FOA procedure, each party offers a specific proposal, in effect, “drawing a conclusion” for the arbitrator. By contrast, at the NB arbitration hearing each party presents evidence, but because there are no specific proposals, each party attempts to encourage the arbitrator to “draw his/her own conclusion” in a way that favors that party’s position. With NB arbitration, each side runs a substantial risk that the arbitrator will not draw the desired conclusion. Generally, a persuasive message is more likely to produce the desired attitude change if a conclusion is drawn by the presenter [45]. However, research also suggests that if the arbitrator is highly motivated and interested in the case and is given time to reflect upon the information that is presented, the likelihood increases that the desired conclusion (e.g., identifying and accepting what the party sees as a reasonable solution) will be communicated [47].

ARBITRATOR DECISION MAKING

All interest arbitrators must make decisions, whether using NB or some other arbitration procedure. However, with traditional FOA it is possible for an arbitrator to simply say that s/he preferred one position rather than the other. Night baseball arbitration, like CA, requires that an arbitrator fashion an appropriate outcome for each outstanding issue. In spite of the importance of this topic, the amount of research conducted on arbitrator decision-making processes has been relatively small (for exceptions, see [13, 26 & 48]) and no research has been conducted using NB arbitration.

Cognitive psychologists and other researchers have investigated behavioral decision making in other contexts, such as managerial decision making and negotiation [49-51]. Much of what has been learned in these contexts may apply in an arbitration setting as well.

Storing and Recalling Information

Cognitive psychologists have identified several factors that facilitate the storage and recall of information in a decision maker’s mind. For example, a vivid presentation helps a person store and recall a set of facts. Repetition helps someone learn information. Placing the information in context also facilitates information storage and recall [50, 52].

Arbitrators are human and are therefore subject to these factors. Attorneys seem to intuitively know some of them (e.g., make the presentation dramatic and vivid). Yet little research has investigated how information is stored and remembered by arbitrators. Nor have researchers examined the type of training arbitrators received and whether this has any effect on storing information (e.g., an arbitrator may be trained to consciously pay more attention to one side’s closing arguments if the opposing side had an unusually dramatic and vivid presentation). Finally, given the nature of the NB arbitration procedure with its focus on presenting

arguments without explicit “final-offer” positions, research should investigate whether there are differences in how arbitrators store and recall this type of information relative to the information that accompanies specific proposals in FOA and CA.

Decisions Are Made Early

Once information has been stored and recalled, it must be evaluated and decisions must be made. We know that in other contexts, decision makers make decisions fairly early in the process and based on a small sample of information to which they attend [53]. For example, professional recruiters often seem to use the qualifications from an applicant’s resume to decide whether that applicant should be hired or rejected; recruiters then seem to use the interview to confirm that decision [54, 55]. Further, it is reported that highly-favorable information that comes early in the interview receives a greater weight than if that same information comes late in the interview [56], suggesting that interviewers—even those who do not read resumes in advance—make a tentative decision early in the interview. Similar temporal effects have been found for auditing decisions [57]. Although a dispute may involve complex issues, arbitrators may use a similar temporal process. An arbitrator who requires prehearing briefs may make a decision on the basis of those briefs, and those who do not require such briefs may make their decision after hearing the introductory statements of each side. At this time, we do not know; research in these areas is needed.

Negative Factors Get More Weight

Arbitrators in many states are required to consider specific factors when deciding public sector labor disputes, such as the tax base of the community, what comparable jobs pay, and economic data such as the inflation rate and the unemployment rate [4, 58]. Arbitrators may rely solely on the testimony and documents of the disputants, or they may employ additional information (e.g., knowledge based on their own experience) concerning these types of factors.

What happens when the testimony or evidence favoring one side’s case appears to be flawed or inconsistent? Suppose, for example, that a union seeking to abolish a residency requirement argues that most comparable communities don’t force city employees to live within the city limits, yet their own witnesses are inconsistent on the percentage of comparable communities with this requirement; furthermore, some relevant data are missing. In other contexts, such as personnel selection, inconsistency (e.g., an applicant says things in the interview that don’t match the resume), missing information (e.g., gaps in the applicant’s work record), and unfavorable information (e.g., an arrest record) are viewed negatively. For example, Oliphant and Alexander reported that professional interviewers tend to treat applicants with missing academic credentials as comparable to those with

low academic credentials; both groups are generally evaluated negatively relative to applicants with high academic achievements [59].

We further know from both performance appraisal and selection interviewer research that negative information receives greater weight than positive information [60-61]. It is as if interviewers frame their decision as one of looking for reasons to eliminate as many applicants as possible from the pool. Extrapolating to multi-issue interest arbitration, if the arbitrator views one side's evidence or testimony negatively on one issue, then the arbitrator may give greater negative weight to this aspect of that party's case than it perhaps warrants. Does discrepant, missing, or unfavorable information unduly influence an arbitrator's decision? Research needs to be conducted on this question for all forms of interest arbitration, including NB arbitration.

Decision Makers Use a Confirming Rather Than a Disconfirming Strategy

Research reveals that decision makers often suffer from *the confirmation bias*: they typically make a tentative decision early and then seek evidence that confirms that early decision. They typically do not seek information that disconfirms their early decision, and when they find it, they do not give it substantial weight. Consequently, the decision maker becomes more convinced of the correctness of his/her tentative decision as evidence is presented. It normally takes a substantial amount of closely-attended-to evidence to reverse this process. Behavioral decision experts have noted that this strategy often produces suboptimal decisions relative to those who employ a disconfirming strategy, whereby they challenge their own assumptions and tentative decisions [50, 54, 56, 62].

Most arbitrators have probably not received training in avoiding the confirmation bias. At present, we do not know whether arbitrators use a confirming strategy. What we do know is that experienced arbitrators are less sensitive than inexperienced arbitrators to "wage comparability" evidence presented by the parties. Yu and Dell'Omo suggest that experienced arbitrators rely more heavily on "heuristic decision-making processes through expertise and experience" [63, p. 154] based on prior cases they have arbitrated. Their results imply that experienced arbitrators have their own internal notions as to what constitutes a reasonable settlement, and they attend to evidence that confirms implementing a settlement consistent with those notions, modified only modestly by other evidence in any specific case. One implication of this for negotiators to use is that they should try to determine what the arbitrator thinks is best (perhaps by reviewing prior decisions) and then present confirmatory, similar evidence that will favor their own side. Any evaluation of an arbitration procedure, such as NB arbitration, should explore these issues further.

Heuristics

Several scholars have discussed the general role that certain mental shortcuts, or cognitive heuristics, play in decision making [64], and other scholars have focused on their role in negotiation situations in particular [49, 62]. While there are numerous heuristics, scholars have tended to focus on three: availability, representativeness, and anchoring [50].⁴

Availability

Decision makers are influenced by the extent to which information is readily stored in and retrieved from memory. For example, people often remember concrete (rather than abstract) statements, face-to-face testimony (rather than written information), vivid presentations and emotional events, and these characteristics—while perhaps irrelevant to the disposition of the case—can unduly influence decision making. This is because they are easily stored in memory and later retrieved, and thus such events are seen as more important or frequent than they actually are [64, 67].

An arbitrator who has heard a previous, similar case and who has rendered a decision in that case might have much of that prior information in memory when deciding a subsequent case. Although the parties in the subsequent case may not have raised similar arguments supporting their positions (and may have even argued for the distinctiveness of their case), the information from the precedent case is readily available in the arbitrator's memory. The arbitrator may overestimate its importance as a precedent case and be predisposed to reach a similar decision in the later case [46]. Slusher and Anderson demonstrated that explanation availability psychologically mediates attitude change in response to persuasion attempts [68].

Representativeness

This mental heuristic is invoked when the person concludes, perhaps prematurely, that the object under consideration is an example (prototype) of a specific category, and thus should be classified accordingly. Usually, some decision automatically follows, once the object has been “correctly” classified into one of a few categories.

The representativeness heuristic might occur among arbitrators as to either the type of case being heard (e.g., this is a “concession bargaining” case) or as to the type of arguments being heard (e.g., this is “disinterested expert witness”

⁴ Psychologists have investigated several types of heuristics and decision-making phenomena (e.g., ignoring the base rate) related to judging frequency, probability, or to making classification judgments. Recent theory and research suggest that many of these may be rooted in similar, memory-based mental processes [65, 66]. Therefore, it is not necessary to discuss every type of heuristic in this article.

testimony rather than “advocate” testimony). The danger is that an arbitrator might prematurely classify a case or evidence and not fully examine its nuances [62].

Anchoring

This mental heuristic is invoked when a prior position causes an insufficient adjustment in attitude toward a subsequent proposal. Negotiators sometimes allow their own opening offers to limit the size of their concessions even though they readily acknowledge that their opening offers are not to be taken seriously [62, 69]. At first glance, anchoring may appear to have less effect with NB arbitration than with FOA, because there are no specific proposals to serve as “anchors.” However, anchoring can affect decision making in several other ways. The anchoring heuristic has been shown to influence arbitrator decision making where the current wage tended to anchor pay raises [14]. Also, if an arbitrator has a prior belief as to what an appropriate settlement is, then settlements that deviate too much from that belief will be rejected. For example, if the arbitrator has a prior belief as to what wage is appropriate, then evidence that supports raising the wage significantly beyond that level may be rejected [63, 68].

These three types of heuristics may play an even more pronounced role in NB arbitration than other procedures because testimony and evidence may lead to an ambiguous conclusion given that specific proposals are not offered. Ambiguous data are often assimilated into prior belief systems, producing “assimilation” effects, rather than “contrast” effects [70]. In the wage example just mentioned, the arbitrator may classify testimony and evidence (the representativeness heuristic), then store and retrieve information (the availability heuristic) based on prior beliefs. The arbitrator may then draw a conclusion regarding a wage adjustment that is more consistent with the arbitrator’s own prior beliefs (anchoring) than what the party was attempting to establish when it attempted to persuade the arbitrator.

Combining Information

Cognitive psychologists have identified several types of patterns that people intuitively use when combining different, and contradictory, pieces of evidence [71, 72]. How these are combined to draw an overall conclusion varies across individuals and situations but generally may take one of several patterns.

Additive

The decision maker simply adds the number of facts favoring one position and separately adds the number of facts favoring the opposing position. The decision maker then agrees with the position that has the largest number of facts supporting it. An inexperienced arbitrator might use this simple way to evaluate each issue. This approach is sometimes called the “aggregated” approach [71].

Weighted

The decision maker assigns more weight to certain testimony or evidence and less to other evidence. The decision maker then multiplies the weights by the favorability of the evidence for each side and creates a composite score to decide what the appropriate outcome should be. If one piece of evidence gets so much weight that all other evidence cannot change the decision, then the decision maker is said to use a “univalent” strategy. Samavati, Haber, and Dilts suggested that arbitrators rarely use formal statistical weights, often relying on subjective, intuitive weights when combining information [73; also see 74-75]. Olson reported that even when “package” FOA is used, arbitrators often report their decision for each issue and often indicate which issues and evidence got the most subjective weight in determining their overall ruling. He further concluded that most arbitrators give roughly equal weight to both wage and nonwage issues when selecting a winner [76].

Integrated

Here, the decision maker reconciles discrepant information through reasoning (e.g., identifying situational variables that warrant different outcomes depending upon their values; identifying moderator variables). One specific type of integrated reasoning uses *Profile matching*. The decision maker looks for patterns of evidence and then makes a decision based on the pattern of the evidence as a whole [71].

Tendencies toward using a particular approach combining information vary as an individual difference variable and may also vary with the situation [71]. Decision makers may suffer from inaccuracies if they combine information in a way that is inconsistent with the objective merits of each side’s case or with legal prescriptions for how information must be weighted and combined.

To summarize, cognitive psychologists and others have identified specific dynamics with regard to how information is stored, recalled, evaluated, and combined. Relatively little research has been conducted on arbitrator decision making and no research has been done on NB arbitration decision making. Generally it is anticipated that the decision-making dynamics described above will operate freely in NB arbitration, subject to individual differences.

COMPARING THE ARBITRATED DECISION WITH THE DISPUTANTS’ PROPOSALS

Scripts and Schema

Scripts are temporal mental representations of what should happen; these often form the basis for expected patterns of behavior or events [62]. For example, many Americans have a script for fat-food dining that differs from their script

for fine dining—each has its own sequence. In a labor relations context, an arbitrator might have a temporal script for how collective bargaining agreements should change from year to year. For example, an arbitrator might expect hourly wages to rise as inflation rises (within some confidence interval). An arbitrator may reject a wage increase proposal that is outside of that confidence interval or which provides for a different type of compensation increase (e.g., knowledge-based pay). Why? Because it does not fit his/her script. Research has not investigated this possibility.

Schema (also called “schemata” or “cognitive maps”) are patterns of mental constructs [77]. Certain variables may be expected to occur together when certain “situational triggers” are present. For example, during an economic recession (the situational trigger) an arbitrator may expect a) pay increases to be small, b) workers to pay a larger portion of their health-related benefits, and c) workers to gain in some intangible areas such as job security or participation. If one side presents a proposal that does not fit the arbitrator’s schema, that proposal may be more likely to be rejected because it is cognitively less demanding to reject discrepant information than to revise one’s schema.

Information Combining

Just as information can be combined in various ways when making an arbitration decision, so information can be combined when comparing disputant proposals to that decision. For example, suppose there are five issues in dispute. An arbitrator using an *additive* strategy might count the number of issues where his/her decision was closer to the union position than the management position. If the union position is closer for a majority of issues, then the arbitrator issues a general ruling for the union. An arbitrator using a *weighted* strategy decides each issue (e.g., -1 for management, and $+1$ for the union) and also assigns weights to each issue (e.g., based on cost) and then creates a composite score. That overall score, if a positive number, suggests a decision for the union. With *integrated* strategies, the arbitrator looks for strategies to reconcile discrepant positions. These may involve invoking intervening variables (e.g., a union of municipal employees based its wage proposal on tax revenue projections based on recent population growth trends, whereas the municipality was considering projected tax revenue based on a recent decline in manufacturing). With *profile matching*, the arbitrator looks at the discrepancy of each side’s position from his/her own decision and adds the discrepancies to arrive at a conclusion as to which side’s position is closer to his/her own.

In summary, with NB arbitration, the third party is required to explicitly formulate a solution and then compare that solution to each party’s final-offer proposals in order to select a winning side. This differs from FOA, where the arbitrator can use the less mentally demanding process of simply deciding which proposal seems less extreme. How NB arbitrators compare proposals to their own

solution and select a winner is an intriguing psychological process that warrants investigation if this procedure is to be understood.

ETHICAL ISSUES WITH NB ARBITRATION

NB arbitration raises several ethical issues that must be addressed. At its core, the parties to NB arbitration are not to present explicit proposals—only evidence that suggests particular types of solutions to the issues in dispute. What if one side presents a specific proposal at the hearing? Will the arbitrator accept that as a matter of course or will the arbitrator view that as an ethical violation of the procedure? Will there be individual differences among arbitrators regarding this matter? Does the same consideration apply to thinly veiled proposals that are presented at the hearing? What will an arbitrator do under such circumstances? Declare a “mistrial?” Ignore the proposal? Become more sympathetic to the opposing side? If NB arbitration is to join the array of accepted labor arbitration procedures, ethical considerations pertaining to the presentation of evidence need to be addressed.

A second ethical issue concerns the manner in which the arbitrator compares his/her own decision (opinion) to the positions of the parties. If it is done in front of the parties, the presence of the parties to whom the arbitrator is accountable may alter the way that the arbitrator compares the decision to the proposals, for actions taken in public are subject to different types of pressures than those made in private. These pressures range from “mere presence” effects to nonverbal impression management to even intimidation and may be similar to the pressures experienced in other social situations, such as those experienced by accountable negotiators [33, 78, 79]. Yet, if the arbitrator considers the proposals in private, the parties may wonder whether the arbitrator actually created his/her written opinion prior to reading the proposals, particularly if his/her opinion is similar to that of the winning proposal. Perhaps a reasonable compromise would be to have the arbitrator issue a written opinion, then, in the presence of a neutral, mutually agreed upon witness, compare that written opinion to each side’s final-offer proposal. Such an approach would alleviate ethical concerns as well as enhance the procedural justice of NB arbitration (see below). On the other hand, if the arbitrator is someone whom the parties trust, the parties may see this additional safeguard as unnecessary; it remains an empirical question.

A third, more general, issue is whether the arbitrator ought to publicize his/her opinion, and perhaps give a reasoned description for why s/he feels that one side’s final offer is closer to that opinion, as opposed to simply declaring one side “the winner” and publicizing that side’s final offer as the award. On the one hand, providing the opinion and the rationale for selecting one side allows both parties to understand the rationale, enhancing its procedural and distributive justice [80]. On the other hand, providing the rationale allows the losing side to search for flawed reasoning and to use this as the basis of a court appeal of the arbitrator’s

verdict. While such court challenges are not common, and are only rarely won, they are more likely if the arbitrator provides the rationale for his/her decision [5]. With NB arbitration, the arbitrator may describe the rationale for both his/her nonbinding opinion and why he/she feels that one side's proposal is closer to that opinion than the other side's proposal. This provides, in effect, two decisions, either of which might be subject to appeal. Perhaps research can determine the most acceptable form of an award and also whether attorneys are more likely to appeal NB arbitration decisions than decisions made with other forms of arbitration.

PROCEDURAL AND DISTRIBUTIVE JUSTICE ISSUES

Ethical issues are a part of a larger consideration of the procedural justice of any type of interest arbitration [81-82]. Researchers investigating justice issues have expressed interest in both the fairness of the methods used to arrive at decisions (procedural justice) and the fairness of the outcomes of those decisions (distributive justice).

Procedural justice is typically measured *subjectively* by asking the disputants (e.g., [83-84]), although specific *objective* characteristics of arbitration procedures may engender specific procedural justice beliefs [85]. In one of the few studies investigating procedural justice-related beliefs about arbitration variations, Rose and Manuel report that Canadian municipal employers currently using CA prefer switching to FOA, whereas their union official counterparts are quite satisfied with CA [86]. Other research has also reported differences in third-party procedural preference across complainant and respondent roles [87]. Thus, future research must also consider possible disputant role differences in procedural justice beliefs and in procedural evaluations.

While many factors (e.g., opportunity to appeal) may be similar across arbitration procedures, one important factor that may differ is disputant *voice* [88-90]. With NB arbitration, the parties can present testimony. However, they are not allowed to articulate a proposal at the hearing. Nor are they allowed to clearly link their testimony and evidence to an articulated proposal. Because of these constraints, we anticipate that disputant perceptions of voice, and consequently, of procedural justice, will be lower with NB arbitration than with FOA.

One specific consideration within the general body of research on procedural justice concerns whether information is used appropriately to arrive at a decision (informational justice). Here NB arbitration might have an advantage over FOA. The informational justice of the NB procedure may be enhanced if the parties believe that the arbitrator took the evidence from both sides, used that information to independently arrive at the "correct" decision, and then selected the closer proposal.

As noted previously, the type of explanation (or lack thereof), may affect disputant perceptions that the arbitrator is ethical. The presence and quality of an

explanation, may, more broadly, influence perceptions of procedural and distributive justice. Explanations, or accounts, typically fall into one of three categories: apologies, excuses, and justifications [91]. Research suggests that disputants usually do not see apologies by third parties as fair, and arbitrators do not seem to offer them. Plausible excuses can enhance the fairness of a decision because they invoke external attributions (e.g., the labor arbitrator was required, by law, to give the greatest weight to the impact of a wage raise on local property taxes), whereas implausible excuses are often rejected, and procedural fairness diminishes. Justifications are subject to more scrutiny because they involve internal attributions concerning the arbitrator, yet a compelling justification can enhance the fairness of the procedure and of the outcome [79, 92].

If the arbitrator's award and rationale is revealed, distributive justice considerations are also invoked [21]. People typically use one of three criteria for their outcome preferences: equity, equality, or need [93]. Arbitrators often use equity-related criteria [14, 39]. The choice of criteria that an arbitrator employs may influence disputant fairness judgments. It also seems likely that an arbitrator's decision is more likely to be seen as fair by one side if the justification for that decision suggests that the arbitrator's rationale corresponds to the same criteria (e.g., similar weight is given to particular evidence) as that side uses, even if the outcome is unfavorable [94].

PROCEDURAL VARIATIONS

Within final-offer arbitration there are numerous procedural variations [1, 28], most of which can be easily adapted for NB arbitration. One variation involves whether the issues are considered individually ("issue-by-issue") or are considered together ("by package"). Scholars and practitioners have written about the relative advantages of each approach [4, 95], and it is not my purpose to review that literature here. However, two alleged advantages are relevant for NB arbitration.

Advocates of the "issue-by-issue" approach suggest that the procedure results in fairer solutions when each issue is ruled upon singly because each issue is decided on its merits. This approach also increases the likelihood that each side will get some of what it wants (suggesting that the parties will report high distributive justice for the outcomes, see [80]). Critics charge that the issue-by-issue approach, as used in traditional FOA, still allows an arbitrator to consciously or subconsciously "split the difference" between the parties, either 1) by awarding a similar number of issues to each side or 2) by awarding selected issues to each side in an arrangement that evenly splits the total labor cost of all of the issues. If preventing these two types of "splitting the difference" is a goal of policy makers, then NB arbitration offers a distinct advantage: The arbitrator must decide each issue without knowing the parties' exact positions.

Also, if an NB arbitrator decides to use the issue-by-issue approach, an important procedural decision must be made: Will the arbitrator use a “simultaneous” or a “sequential” approach? With the “simultaneous” approach, the arbitrator decides each of the individual issues and then compares them at one session to the final offers submitted by the parties. With the “sequential” approach, the arbitrator decides the first issue, compares his or her award to the final offers of the two parties for that issue, and selects a winner. Then the arbitrator considers the second issue, etc. If NB arbitrators are to use the sequential approach, then to follow such a sequence without knowing each side’s final offers on the remaining issues in advance, the arbitrator must insure that the parties somehow separate their offers. For example, the NB arbitrator might request that the parties place their final offers for each issue in separate, labeled, envelopes. This will safeguard the advantage that NB arbitration enjoys over traditional FOA.

Advocates of the “by-package” approach argue that only the risk of losing everything in arbitration drives people to moderate their demands and to bargain seriously [4, 18]. Yet, as discussed previously, negotiator self-serving bias and overconfidence are difficult to overcome. NB arbitration enhances uncertainty and risk relative to traditional FOA because the parties not only do not know whether the arbitrator will select their position, but there is uncertainty as to whether the third party will even perceive a party’s position correctly. Perhaps the increased uncertainty offered by NB arbitration will be sufficient to overcome negotiator optimism, self-serving bias, and overconfidence. This analysis suggests that “by-package” NB arbitration will have a higher voluntary settlement rate than other forms of arbitration.

Another procedural variation occurs as to *when* the parties are to submit their final offers. Some arbitrators request the formal final offers be submitted in sealed envelopes prior to the hearing. Others do not request the offers until after the hearing. There is some evidence from FOA that, in the latter situation, the parties look for cues from arbitrator statements, questions, or reactions as to whether a particular position will be acceptable and they may moderate their “final” offers further before submitting their formal positions after the hearing [96]. Similar dynamics may be at work with NB arbitration. However, the enhanced uncertainty associated with the procedure may cause even further concession-making by the parties. Research needs to examine both the behavioral (e.g., offers) and attitudinal (e.g., justice attitudes) responses to such temporal variations.

Finally, there is the question of mediation within the arbitration procedure. Some have suggested that because of the “winner-take-all” nature of FOA, the parties sometimes look to the arbitrator to mediate—or to at least issue nonbinding and sometimes informal “advisory arbitration” opinions—before, during, or even after the arbitration hearing, but usually before formally selecting the winning proposal [96, 97]. Advisory opinions encourage the losing side to seek a negotiated compromise. The assumption is that a negotiated or mediated settlement is preferable to an arbitrated one. An arbitrator using the NB procedure also has

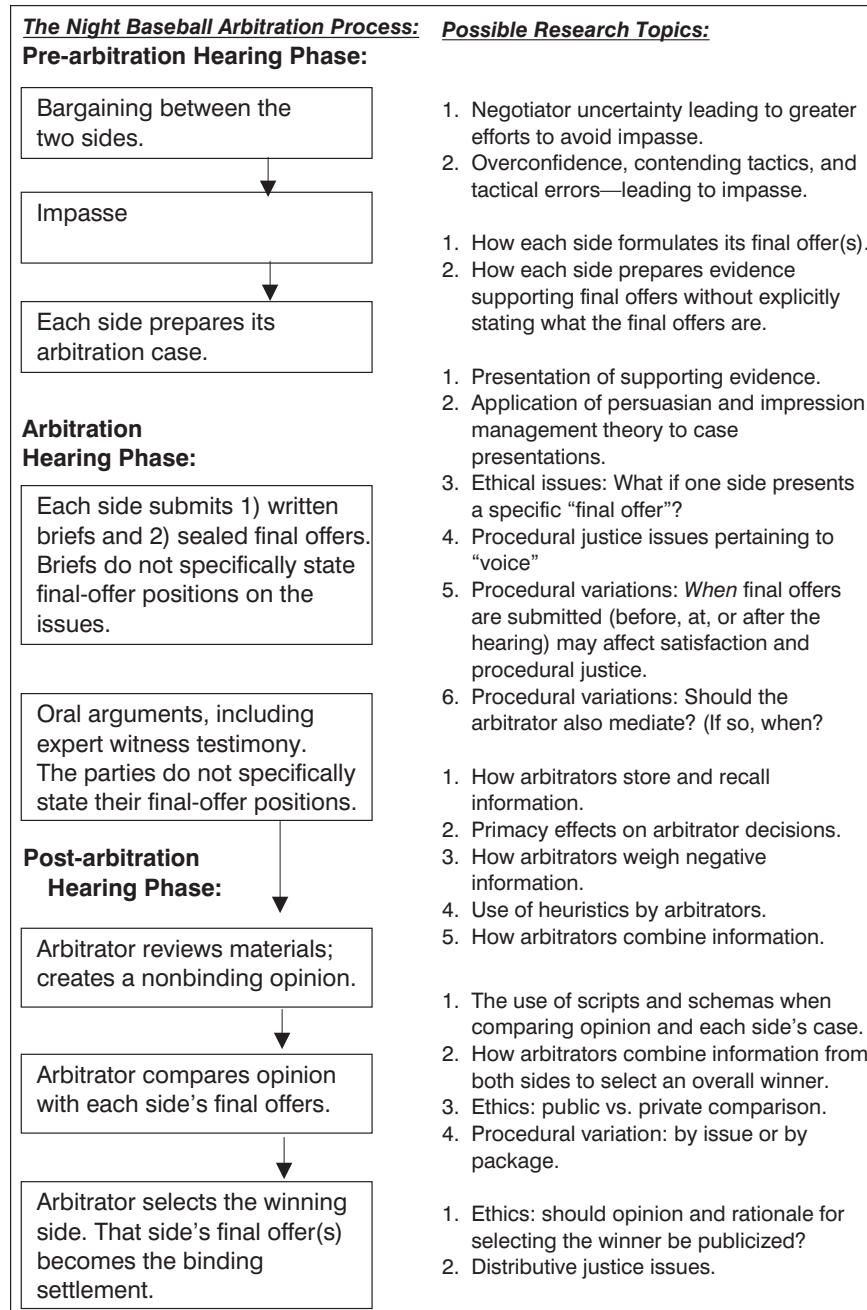


Figure 2. A summary of possible research topics in the night baseball arbitration process.

opportunities to mediate, if s/he chooses to do so. However, the arbitrator has them under slightly different conditions: the NB third party can mediate before or after writing a ruling, or even after selecting the “winner” but before revealing that winner to the disputants. Further, the NB arbitrator may be seen by the disputants as a powerful mediator. The parties may readily accept his or her suggestions for a compromise if they infer that they have already lost on particular issues. There is also the possibility that the arbitrator may pressure the parties to accept the arbitrator’s preferred solution rather than providing facilitating conditions for the negotiators to work out their own agreement. In this sense, mediation within NB arbitration may be like other hybrid third-party procedures [95, 98]. Research needs to be conducted to determine whether these dynamics operate as hypothesized here.

CONCLUSION

Night baseball arbitration has much in common with traditional final-offer interest arbitration. However, it is sufficiently different in the psychological processes that are invoked by both the disputants and the arbitrator as to warrant scientific investigation. The procedure must be compared to conventional arbitration, FOA, and no-arbitration controls in order to examine a number of unanswered questions about all three types of arbitration. In this article, I call for such investigation and point to specific types of issues that must be addressed. The issues that have been discussed, and where they are likely to occur in the NB arbitration process, are summarized in Figure 2. Procedural variations and their likely impact on NB arbitration must also be considered in any evaluation of this procedure.

Night baseball arbitration is a widely offered procedure for business disputes, and it may be an appropriate alternative to public-sector labor strikes. As research investigating night baseball arbitration advances, scientists may be better able to inform policy makers regarding effective and excellent procedural design.

ACKNOWLEDGMENTS

The comments of Donald Conlon, Tom Rhoher, and Kristine Ross on earlier versions of this manuscript are deeply appreciated.

ENDNOTES

1. J. Lund and C. L. Maranto, Public sector labor law: An update, in D. Belman, M. Gunderson, and D. Hyatt (Eds.), *Public sector employment in a time of transition* (pp. 21-57), Madison, Wis.: Industrial Relations Research Association, 1996.

2. R. Hebdon, Public sector dispute resolution in transition, in D. Belman, M. Gunderson, and D. Hyatt (Eds.), *Public sector employment in a time of transition* (pp. 85-125). Madison, Wis.: Industrial Relations Research Association, 1996.
3. F. C. Lunenburg, Collective bargaining in the public schools: Issues, tactics, and new strategies, *Journal of Collective Negotiations in the Public Sector*, 29(4), pp. 259-272, 2000.
4. D. H. Wollett, J. R. Grodin, and J. M. Weisberger, *Collective bargaining in public employment, fourth edition*, St. Paul, Min.: West Publishing, 1993.
5. I. Johnson, How to save time and money in arbitration—Users speak up, *Dispute Resolution Journal*, 57(3), pp. 26-44, 2002, Aug.-Oct.
6. C. M. Stevens, Is compulsory arbitration compatible with bargaining? *Industrial Relations*, 5, pp. 38-50, 1966.
7. F. A. Starke and W. W. Notz, Pre- and post-intervention effects of conventional vs. final offer arbitration, *Academy of Management Journal*, 24, 832-850, 1981.
8. J. C. Anderson and T. A. Kochan, Impasse procedures in the Canadian federal service, *Industrial and Labor Relations Review*, 30, 282-301, 1977.
9. J. C. Anderson, Arbitration in the Canadian federal service, in D. Lewin, P. Feuille, and T. A. Kochan (Eds.), *Public sector labor relations: Analysis and readings, second edition* (pp. 326-344), Sun Lakes, Ariz.: Thomas Horton, 1981.
10. J. J. Loewenberg, Bargaining intensity and interest arbitration, in J. Burton (Ed.), *Industrial relations research association: Proceedings of the forty-fourth annual meeting, January 3-5, 1992, New Orleans* (pp. 385-391). Madison, Wis.: IRRA, 1992.
11. D. E. Bloom, Empirical models of arbitrator behavior under conventional arbitration, *Review of Economic and Statistics*, 68, pp. 578-586, 1986.
12. O. Ashenfelter and D. E. Bloom, Models of arbitrator behavior: Theory and evidence, *American Economic Review*, 74, pp. 578-586, 1984.
13. M. H. Bazerman and H. S. Farber, Arbitrator decision making: When are final offers important? *Industrial and Labor Relations Review*, 39, pp. 76-89, 1985.
14. M. H. Bazerman, Norms of distributive justice in interest arbitration, *Industrial and Labor Relations Review*, 38, pp. 558-570, 1985.
15. D. R. Marburger, Is exchangeable arbitrator behavior necessarily deliberate? *The International Journal of Conflict Management*, 5, pp. 107-204, 1994.
16. C. Olson, Dispute resolution in the public sector, in B. Aaron, J. M. Najita, and J. L. Sterns (Eds.), *Public Sector Bargaining, second edition* (pp. 160-188), Washington, D.C.: Bureau of National Affairs, 1988.
17. C. Olson, G. G. Dell’Omo, and P. Jarley, A comparison of interest arbitration decision-making in experimental and field settings, *Industrial and Labor Relations Review*, 45, pp. 711-723, 1992.
18. R. L. Miller, High risk final offer interest arbitration in Oregon, *Journal of Collective Negotiations in the Public Sector*, 28, pp. 265-279, 1999.
19. D. R. Marburger and J. F. Scroggins, Risk and final-offer arbitration usage rates: Evidence from major league baseball, *Journal of Labor Research*, 17, pp. 735-745, 1996.
20. D. J. Faurot and S. McAllister, Salary arbitration and pre-arbitration negotiation in major league baseball, *Industrial and Labor Relations Review*, 45, pp. 697-710, 1992.

21. R. D. Bretz, Jr. and S. L. Thomas, Perceived equity, motivation, and final-offer arbitration in major league baseball, *Journal of Applied Psychology*, 77, pp. 280-287, 1992.
22. C. Bovis, Labor arbitration as an industrial relations dispute settlement procedure in world labor markets, *Labor Law Journal*, 45, pp. 147-156, 1994, March.
23. P. Feuille, Final offer arbitration and the chilling effect, *Industrial Relations*, 14, pp. 302-310, 1975.
24. G. Stokes, Solomon's wisdom: An early analysis of the effects of the police and fire interest arbitration reform act in New Jersey, *Journal of Collective Negotiations in the Public Sector*, 28, pp. 219-231, 1999.
25. O. Ashenfelter, J. Currie, H. S. Farber, and M. Spiegel, An experimental comparison of dispute rates in alternative arbitration systems, *Econometrica*, 60, pp. 1407-1431, 1992.
26. D. L. Dickinson, A comparison of conventional, final-offer, and "combined" arbitration for dispute resolution, *Industrial and Labor Relations Review*, 57, pp. 288-301, 2004.
27. L. S. Coltri, *Conflict diagnosis and alternative dispute resolution*, Upper Saddle River, New Jersey: Pearson/Prentice Hall, 2004.
28. J. Stuller, Settling for 'bearable unhappiness', *Across the Board*, 30(9), pp. 16-22, Nov./Dec. 1993.
29. V. G. Rosenblum, On law's responsiveness to social scientists' findings: An intelligible nexus? *Psychology, Public Policy, & Law*, 2, pp. 620-634, 1996.
30. S. J. Brams and S. Merrill III, Equilibrium strategies for final-offer arbitration: There is no median convergence, *Management Science*, 29, pp. 927-941, 1983.
31. H. S. Farber, An analysis of final-offer arbitration, *Journal of Conflict Resolution*, 27, pp. 683-705, 1980.
32. H. S. Farber, Splitting the difference in interest arbitration, *Industrial and Labor Relations Review*, 35, pp. 70-77, 1981.
33. R. J. Lewicki, B. Barry, D. M. Saunders, and J. W. Minton, *Negotiation, Fourth Ed.*, Boston: Irwin/McGraw-Hill, 2003.
34. L. Babcock, Strategic behavior in negotiations and the use of arbitration, in J. Burton (Ed.), *Industrial Relations Research Association: Proceedings of the forty-fourth annual meeting, January 3-5, 1992, New Orleans*, (pp. 375-384), Madison, Wis.: IRRRA, 1992.
35. M. A. Neale and M. H. Bazerman, The effects of framing and negotiator overconfidence on bargaining behaviors and outcomes, *Academy of Management Journal*, 28, pp. 34-49, 1985.
36. L. Babcock and G. Loewenstein, Explaining bargaining impasse: The role of self-serving biases, *Journal of Economic Perspectives*, 11, pp. 109-126, 1997.
37. D. G. Pruitt, *Negotiation behavior*, New York: Academic Press, 1981.
38. L. Ross and C. Stillinger, Barriers to conflict resolution, *Negotiation Journal*, 8, pp. 389-404, 1991.
39. R. A. Turpin, an analysis of public sector interest arbitrators' assessments of wage comparability, *Journal of Collective Negotiations in the Public Sector*, 27, pp. 45-51, 1998.
40. R. M. Perloff, *The dynamics of persuasion*, Hillsdale, N.J.: Lawrence Erlbaum Associates, 1993.

41. W. D. Crano, Milestones in the psychological analysis of social influence, *Group Dynamics*, 4(1), pp. 68-80, 2000.
42. D. Eylon, R. A. Giacalone, and H. G. Pollard, Beyond contractual interpretation: Bias in arbitrators' case perceptions and award recommendations, *Journal of Organizational Behavior*, 21, pp. 513-524, 2000.
43. B. A. Mellers, Choice and the relative pleasure of consequences, *Psychological Bulletin*, 126(6), pp. 910-924, 2000.
44. D. Desteno, R. E. Petty, D. D. Rucker, D. T. Wegener, and J. Braverman, Discrete emotions and persuasion: The role of emotion-induced expectancies, *Journal of Personality and Social Psychology*, 86, pp. 43-56, 2004.
45. W. J. McGuire, The nature of attitudes and attitude change, in G. Lindzey and E. Aronson (Eds.), *The handbook of social psychology*, Vol. 3, Cambridge, Mass.: Addison-Wesley, 1969, pp. 136-314.
46. C. Wu and D. R. Shaffer, Susceptibility to persuasive appeals as a function of source credibility and prior experience with the attitude object, *Journal of Personality and Social Psychology*, 52, pp. 677-688, 1987.
47. H. C. Triandis, *Attitude and attitude change*, New York: Wiley, 1971.
48. M.D. Chaubey, R. G. Soni, and F. J. Slack, An analytic hierarchy process model of arbitrator decision making in final-offer arbitration, *Journal of Collective Negotiations in the Public Sector*, 29, pp. 233-244, 2000.
49. L. L. Thompson, *The mind and heart of the negotiator, second edition*, Upper Saddle River, N.J.: Prentice Hall, 2001.
50. M. H. Bazerman, *Judgment in managerial decision making*, New York: Wiley, 1994.
51. D. Kahneman, A perspective on judgment and choice: Mapping bounded rationality, *American Psychologist*, 58(9), pp. 697-720, 2003.
52. R. L. DeSimone and D. M. Harris, *Human resource development, second edition*, Fort Worth, Tex.: Dryden, 1998.
53. A. Newell and H. A. Simon, *Human problem solving*, Englewood Cliffs, N.J.: Prentice Hall, 1972.
54. R. L. Dipboye, Threats to the incremental validity of interviewer judgments, in R. W. Eder and G. R. Ferris (Eds.), *The employment interview: Theory, research, and practice* (pp. 45-60), Newbury Park, CA: Sage, 1989.
55. S. J. Motowidlo, Information processing in personnel decisions, in K. M. Rowland and G. R. Ferris (Eds.), *Research in Personnel and Human Resources Management*, (Vol. 4, pp. 1-44), Greenwich, CT: JAI Press, 1986.
56. L. H. Peters and J. Terborg, The effects of temporal placement of unfavorable information and of attitude similarity on personnel selection decisions, *Journal of Applied Psychology*, 13, pp. 279-293, 1975.
57. D. N. Ricchiute, Evidence, memory, and causal order in a complex audit decision task, *Journal of Experimental Psychology: Applied*, 4, pp. 3-15, 1998.
58. B. V. H. Schneider, Public-sector labor legislation—An evolutionary analysis, in B. Aaron, J. M. Najita, and J. L. Stern (Eds.), *Public-sector bargaining: Second edition* (pp. 189-228), Washington, D.C.: Bureau of National Affairs, Inc., 1988.
59. V. N. Oliphant and E. R. Alexander III, Reactions to resumes as a function of resume determinateness, applicant characteristics, and sex of raters, *Personnel Psychology*, 35, pp. 829-842, 1982.

60. M. London and J. R. Poplawski, Effects of information on stereotype development in performance appraisal and interview contexts, *Journal of Applied Psychology*, 61, pp. 199-205, 1976.
61. P. M. Rowe, Unfavorable information and interview decisions, in R. W. Eder and G. R. Ferris (Eds.), *The employment interview: Theory, research, and practice* (pp. 77-89), Newbury Park, CA: Sage, 1989.
62. M. A. Neale and M. H. Bazerman, *Cognition and rationality in negotiation*, New York: Free Press, 1991.
63. G. C. Yu and G. G. Dell’Omo, Differences in decision making between experienced judges and inexperienced judges in dispute resolution: The case of final-offer interest arbitration, *Journal of Collective Negotiations in the Public Sector*, 25, pp. 137-156, 1996.
64. A. Tversky and D. Kahneman, Availability: A heuristic for judging frequency and probability, *Cognitive Psychology*, 5, pp. 207-232, 1973.
65. D. L. Hintzman, Judgments of frequency and recognition memory in a multiple-trace memory model, *Psychological Review*, 95, pp. 528-551, 1988.
66. M. R. P. Dougherty, C. F. Gettys, and E. E. Ogden, MINERVA-DM: A memory processes model for judgments of likelihood, *Psychological Review*, 106, pp. 180-209, 1999.
67. G. B. Northcraft, M.A. Neale, and V. L. Huber, The effects of cognitive bias and social influence on human resources management decisions, in G. R. Ferris and K. M. Rowland (Eds.), *Research in Personnel and Human Resources Management*, 4 (pp. 1-44), Greenwich, CT: JAI Press, 1988.
68. M. P. Slusher and C. A. Anderson, Using causal persuasive arguments to change beliefs and teach new information. The mediating role of explanation availability and evaluation bias in the acceptance of knowledge, *Journal of Educational Psychology*, 88(1), pp. 110-122, 1996.
69. A. D. Galinsky and T. Mussweiler, First offers as anchors: The role of perspective-taking and negotiator focus, *Journal of Personality & Social Psychology*, 81, pp. 657-669, 2001.
70. J. W. Smither, R. R. Reilly, and R. Buda, Effect of prior performance information on ratings of present performance: Contrast versus assimilation revisited, *Journal of Applied Psychology*, 73, pp. 487-496, 1988.
71. S. J. Carroll and C. E. Schneier, *Performance appraisal and review systems: The identification, measurement, and development of performance in organizations*, Scott, Foresman, and Company, 1982.
72. D. W. Wegner and R. R. Vallacher, *Implicit psychology*, New York: Oxford University Press, 1977.
73. H. Samavati, L. J. Haber, and D. A. Dilts, Comparability and the interest arbitration of economic disputes in the public sector, *Journal of Collective Negotiations in the Public Sector*, 20, pp. 159-166, 1991.
74. W. Grove and P. E. Meel, Comparative efficiency of informal (subjective, impressionistic) and formal (mechanical, algorithmic) prediction procedures: The clinical-statistical controversy, *Psychology, Public Policy, and Law*, 2(2), pp. 293-323, 1996.
75. C. R. Fox, A belief-based model of decision under uncertainty, *Management Science*, 44, pp. 879-896, 1998.

76. C. Olson, Arbitrator decision making in multi-issue disputes, in J. Burton (Ed.), *Industrial Relations Research Association: Proceedings of the forty-fourth annual meeting, January 3-5, 1992, New Orleans* (pp. 392-401), Madison, WI.: IRRRA, 1992.
77. A. S. Huff (Ed.), *Mapping strategic thought*, New York: Wiley, 1990.
78. G. R. Ferris and T. R. Mitchell, The components of social influence and their importance for human resources research, in K. M. Roland and G. R. Ferris (Eds.), *Research in personnel and human resources management* (Vol. 5, pp. 103-128), Greenwich, CT: JAI Press, 1987.
79. G. M. Fitzsimons and J. A. Bargh, Thinking of you: Nonconscious pursuit of interpersonal goals associated with relationship partners, *Journal of Personality & Social Psychology*, 84(1), pp. 148-163, 2003.
80. D. E. Conlon and W. H. Ross, Appearances do count: The effects of outcomes and explanations on disputant fairness judgments and supervisory evaluations, *The International Journal of Conflict Management*, 8, pp. 5-31, 1997.
81. G. S. Leventhal, *What should be done with equity theory? New approaches to organizational behavior* (Vol. 12, pp. 111-157), Greenwich, Conn.: JAI Press, 1990.
82. G. S. Leventhal, J. Karuza, and W. R. Fry, Beyond fairness: A theory of allocation preferences, in G. Mikula (Ed.), *Justice and social interaction* (pp. 167-218), New York: Springer-Verlag, 1980.
83. J. A. Colquitt, On the dimensionality of organizational justice: A construct validation of a measure, *Journal of Applied Psychology*, 86, pp. 386-400, 2001.
84. J. A. Colquitt, D. E. Conlon, M. J. Wesson, C. O. Porter, and K. Y. Ng, Justice at the millennium: A meta-analytic review of 25 years of organizational justice research, *Journal of Applied Psychology*, 86, pp. 425-445, 2001.
85. R. A. Posthuma, Procedural due process and procedural justice in the workplace: A comparison and analysis, *Public Personnel Management*, 32, pp. 181-196, 2003.
86. J. B. Rose and C. Manuel, Attitudes toward collective bargaining and compulsory arbitration, *Journal of Collective Negotiations in the Public Sector*, 25, pp. 287-310, 1996.
87. R. S. Peirce, D. G. Pruitt, and S. J. Czaja, Complainant-respondent differences in procedural choice, *The International Journal of Conflict Management*, 4(3), pp. 199-222, 1993.
88. J. Thibaut and L. Walker, *Procedural justice: A psychological analysis*, Hillsdale, NJ: Erlbaum, 1975.
89. J. Thibaut and L. Walker, A theory of procedure, *California Law Review*, 66, pp. 541-566, 1978.
90. E. A. Lind and T. R. Tyler, *The social psychology of procedural justice*, New York: Plenum, 1988.
91. J. Greenberg, Looking fair versus being fair: Managing impressions of organizational justice, in B. M. Staw and L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 12, pp. 111-157), Greenwich, CT: JAI Press, 1990.
92. J. C. Shaw, E. Wild, and J. A. Colquitt, To justify or excuse?: A meta-analytic review of the effects of explanations, *Journal of Applied Psychology*, 88, pp. 444-458, 2003.
93. M. Deutsch, *Distributive justice: A social-psychological perspective*, New Haven, CT: Yale University Press.

94. T. R. Tyler and M. A. Belliveau, Tradeoffs in justice principles: Definitions of fairness, in B. B. Bunker and J. Z. Rubin (Eds.), *Conflict, cooperation & justice: Essays inspired by the work of Morton Deutsch* (pp. 291-314), San Francisco: Jossey-Bass, 1995.
95. W. B. Gould, *Strikes, dispute procedures, and arbitration: Essays on labor law*, Westport, CT: Greenwood, 1985.
96. C. M. Rhemus, Is a "final offer" ever final?, in B. D. Dennis and G. G. Somers (Eds.), *Arbitration—1974: Proceedings of the twenty-seventh annual meeting, National Academy of Arbitrators, Kansas City, Missouri, April 23-26, 1974* (pp. 77-81), Washington, D.C.: Bureau of National Affairs, 1974.
97. H. T. Edwards, R. T. Clark Jr., and C. B. Craver, *Labor relations law in the public sector: Cases and materials, fourth edition*, Charlottesville, VA: Michie Co., 1991.
98. W. H. Ross and D. E. Conlon, Hybrid forms of third-party dispute resolution: Theoretical implications of combining mediation and arbitration, *Academy of Management Review*, 25, pp. 416-427, 2000.

Direct reprint requests to:

William H. Ross, Ph.D.
Department of Management,
North Hall Room 418
University of Wisconsin-La Crosse
1725 State Street
La Crosse, WI 54601
e-mail: ross.will@uwlax.edu