

**Disputant Preferences for Mediated or Adjudicated Processes in Administrative Agencies:  
The Occupational Safety and Health Review Commission Settlement Part Program**

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## ABSTRACT

Previous research examining disputants' preferences for mediation over more formal adjudicative proceedings is limited and mostly experimental. Moreover, this work has not examined preferences in relation to repeated experience with various types of proceedings. We surveyed disputants who have experienced different types of proceedings in administrative adjudication and administrative law judge mediation in the Settlement Part Program at the Occupational Safety and Health Review Commission (OSHRC). We find that the higher the perceptions of procedural justice, the greater the preference for use of mediation. In addition, the more total experience disputants have in the OSHRC dispute system (including both adjudication and settlement judge mediation), the greater their preference for mediation.

## I. INTRODUCTION

What do disputants prefer: mediated or adjudicatory procedures? This question has been the subject of debate among dispute resolution scholars for over three decades of procedural justice research.<sup>1</sup> We contribute to this debate using surveys of disputants who have participated in either a mediated settlement judge program or traditional administrative adjudication in a federal administrative agency. This study uses data from mediation and adjudication programs at the Occupational Safety and Health Review Commission (OSHRC). OSHRC is the independent appeals agency for Occupational Safety and Health Administration citations.

First, this article briefly reviews relevant literature on procedural justice and disputant preferences for different procedures. Second, it examines literature on repeat players in adjudicatory and dispute resolution processes. Next, it describes the Occupational Safety and Health Commission as the research setting, as well as our methods. Fourth, it presents two main results. We find that the higher the perceptions of procedural justice, the greater the preference for alternative dispute resolution (mediation/ADR). In addition, the more total experience disputants have in the OSHRC dispute system design (including both adjudication and settlement judge mediation), the greater their preference for mediation. We conclude that dispute resolution

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<sup>1</sup> For examples, see Lisa B. Bingham, *Why Suppose- Let's Find Out: A Public Policy Research Program on Dispute Resolution*, J. DISP. RESOL. 101 (2002); Donna Shestowsky, *Procedural Preferences in Alternative Dispute Resolution: A Closer, Modern Look at an Old Idea*, 10 PSYCHOL. PUB. POL'Y & L. 211 (2004); Donna Shestowsky, *Disputants' Preferences for Court-Connected Dispute Resolution Procedures: Why We Should Care and Why We Know So Little*, 23 OHIO ST. J. ON DISP. RESOL. 549 (2008).

programs play a critical role in dispute system designs for civil enforcement of public law in administrative agencies.

## II. LITERATURE

This article examines participant preferences for mediation contrasted with administrative adjudication in an applied field setting in a federal agency. To put this project into context, this section will first briefly address alternative dispute resolution (ADR) programs in courts and administrative agencies. It will then discuss the relevant literature on procedural justice and the repeat player in these settings. Lastly, it will address OSHRC's legal and regulatory framework and its system design.

### *A. Dispute Resolution in the Courts and Administrative Agencies*

Under the Alternative Dispute Resolution Act of 1998, Congress directed federal civil trial courts to develop alternative dispute resolution (ADR) programs; many programs entailed mediation and the use of various designs to encourage settlement.<sup>2</sup> Mediation is a process in which a third party who generally is neutral or impartial aids the disputants in negotiating a resolution to their dispute.<sup>3</sup> Mediation usually entails identifying issues, using problem-solving communication techniques, and caucusing with parties in confidential settings. While there is no consensus on using the term "mediation" to apply to settlement judges or judicial settlement

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<sup>2</sup> Caroline Harris Crowne, *The Alternative Dispute Resolution Act of 1998: Implementing a New Paradigm of Justice*, 76 N.Y.U. L. REV. 1768 (2001).

<sup>3</sup> For a review of empirical research literature on mediation, see James A. Wall and Timothy C. Dunne, *Mediation Research: A Current Review*, 28 NEGOTIATION J. 217-244 (2012).

conferences, it is generally accepted that judges use these techniques in this role.<sup>4</sup> Since 1998, there has been tremendous growth in the use of dispute resolution, including both mediation and arbitration, in the state and federal courts.<sup>5</sup>

Federal executive branch agencies have authority to use negotiation, mediation, and other dispute resolution processes under the Administrative Dispute Resolution Act of 1996.<sup>6</sup> The majority of federal agencies initially adopted dispute resolution in the areas of employment and procurement; the use of dispute resolution in civil adjudicatory proceedings and enforcement emerged more slowly.<sup>7</sup> As in the case of the federal courts, federal agencies use administrative law judges as settlement judges who use mediation and case management techniques to attempt to resolve cases prior to adjudication.<sup>8</sup>

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<sup>4</sup> Sylvia Shaz Shweder, *Judicial Limitations in ADR: The Role and Ethics of Judges Encouraging Settlements*, 20 GEO. J. LEGAL ETHICS 51 (2007).

<sup>5</sup> For reviews of the field research see Thomas Stipanowich, *ADR and the 'Vanishing Trial': The Growth and Impact of 'Alternative Dispute Resolution,'* 1 J. EMPIRICAL LEGAL STUD. 843 (2004); Thomas Stipanowich, *The Third Arbitration Trilogy: Stolt-Nielsen, Rent-A-Center, Concepcion and the Future of American Arbitration*, 22 AM. REV. INT'L ARB 323 (2012); Roselle L. Wissler, *The Effectiveness of Court-Connected Dispute Resolution in Civil Cases*, 22 CONFLICT RESOL. Q. 55 (2004).

<sup>6</sup> 5 U.S.C.A. Section 571, et seq.; Federal Interagency ADR Working Group, [www.adr.gov](http://www.adr.gov).

<sup>7</sup> Lisa B. Bingham & Charles R. Wise, *The Administrative Dispute Resolution Act of 1990: How Do We Evaluate Its Success*, 6 J. PUBLIC ADM. RES. THEORY 383 (1996); Tina Nabatchi, *The Institutionalization of Alternative Dispute Resolution in the Federal Government*, 67 PUB. ADMIN. REV. 646 (2007). State agencies have adopted mediation in administrative adjudications. Nancy Welsh, *Stepping Back Through the Looking Glass: Real Conversations with Real Disputants About Institutionalized Mediation and Its Value*, 19 OHIO STATE JOURNAL ON DISPUTE RESOLUTION 573 (2004).

<sup>8</sup> Jeffrey Senger, *FEDERAL DISPUTE RESOLUTION: USING ADR WITH THE UNITED STATE GOVERNMENT* (2003).

## *B. Procedural Justice and Disputants' Assessments of Mediation and Adjudication*

Perhaps the leading theoretical framework for examining how participants respond to processes for resolving disputes is procedural justice, which predicts that participants will be more satisfied with the outcome if they believe that the process itself is fair.<sup>9</sup> They will more likely believe a process is fair if they have an opportunity to participate in the process, if they have a sense of control over the process, and if they feel they are treated with respect.<sup>10</sup> These procedural justice effects are independent from the objective economic outcome of the process.<sup>11</sup> Lind and Tyler suggest the results from procedural justice research can best be explained by a group value model; people are more satisfied with voice in particular and procedural justice in general because these demonstrate that the participants are full status, full-fledged members of the group or organization using the procedure.<sup>12</sup> Proponents of ADR (specifically, mediation) argue that participants will be more satisfied with it than with traditional adversarial procedures because they will have more control over the process, and enjoy greater opportunity for voice and more control over the outcome.<sup>13</sup> Moreover, they claim that parties will have a better opportunity to develop settlements that meet their underlying needs and concerns, or interests, and that this will enhance participant satisfaction.<sup>14</sup>

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<sup>9</sup> E. Allan Lind & Tom R. Tyler, *THE SOCIAL PSYCHOLOGY OF PROCEDURAL JUSTICE* (1988).

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*

<sup>13</sup> William L. Ury, Jeanne M. Brett, & Stephen B. Goldberg, *GETTING DISPUTES RESOLVED: DESIGNING SYSTEMS TO CUT THE COST OF CONFLICT* (1988).

<sup>14</sup> Roger Fisher, William L. Ury, & Bruce Patton, *GETTING TO YES: NEGOTIATING AGREEMENT WITHOUT GIVING IN* (2d ed. 1991).

Researchers used the procedural justice framework to assess how disputants evaluate different procedures. Shapiro and Brett compared participant satisfaction in labor grievance mediation to labor arbitration and found that those who used mediation gave it higher procedural justice ratings than those who used arbitration gave to the arbitration process.<sup>15</sup> Brett, Barsness and Goldberg used satisfaction as a dimension of comparison for mediation cases from four service providers.<sup>16</sup> Lind, *et al.* used the procedural justice framework to compare participant perceptions and satisfaction with various forms of court-connected ADR in three state courts.<sup>17</sup> They interviewed personal injury litigants whose cases had been resolved by trial, court-annexed arbitration, judicial settlement conferences, or bilateral settlement. This study focused on two things: (1) whether outcome-related factors such as the amount of settlement or verdict, cost of litigation, and the time taken to resolve the case have greater impact on litigants' evaluations of litigation experiences than do process-related factors or litigant characteristics such as gender, income, and race; and (2) whether, as is often supposed, bilateral settlement negotiation is viewed more favorably than third-party procedures. The findings showed that litigants' views of the two adjudicatory procedures, especially trials, were much more favorable than might be expected. There was no substantial relationship between procedural fairness judgments and objective measures of outcome, cost, and delay. They found that participants rated non-binding

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<sup>15</sup> Debra L. Shapiro & Jeanne M. Brett, *Comparing Three Processes Underlying Judgment of Procedural Justice: A Field Study of Mediation and Arbitration*, 65 J. PERS. SOC. PSYCHOL. 1167 (1993).

<sup>16</sup> Jeanne M. Brett, Zoe I. Barsness, & Stephen B. Goldberg, *The Effectiveness of Mediation: An Independent Analysis of Cases Handled by Four Major Service*, 12 NEGOTIATION J. 259 (1996).

<sup>17</sup> E. Allan Lind, Judith Resnik, Robert J. MacCoun, Patricia Ebener, William L.F. Felstiner, Deborah R. Hensler, & Tom R. Tyler, *In the Eye of the Beholder: Tort Litigants' Evaluations of their Experiences in the Civil Justice System*, 24 LAW & SOC'Y REV. 953 (1990).

arbitration more highly on respectful treatment and thus fairness than bilateral settlement or judicial settlement conferences, but these conferences often did not involve any direct participation for litigants; instead attorneys usually met with a judge in chambers to discuss settlement.<sup>18</sup>

The procedural justice framework is a well-established method for comparing dispute resolution programs. It is the framework for much of the field research on disputant assessments after they experience a dispute system (or ex post). However, this work has not examined preferences in relation to repeated experience with various processes.

### *C. Disputant Preferences for Mediated or Adjudicatory Procedures*

Professor Donna Shestowsky has argued for more research on disputant preferences, both directly and also comparing ex ante and ex post preferences, that is, both before and after disputants have participated in a process.<sup>19</sup> In her review of the limited literature on disputant preferences, Shestowsky points out that there is a split of opinion as to whether disputants prefer adjudicatory or non-adjudicatory procedures.<sup>20</sup> In much of the early social psychology experiments, subjects were students who had not experienced procedures and expressed preferences for more adjudicatory procedures. Hensler, citing early work by Thibaut and Walker, argues against mandating that disputants use mediation in lieu of adjudication; she argues that “neither statistical data about claiming rates nor public opinion surveys about lawyers lead

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<sup>18</sup> For more comprehensive current reviews of the literature, see Shestowsky 2004 & 2008, *supra* note 1.

<sup>19</sup> Shestowsky 2008 (observing uniformity in research methods, with one exception, looking at disputant preferences only after they have experienced a procedure), *supra* note 1 at 66.

<sup>20</sup> Shestowsky 2004 at 221.

directly to the conclusion that left to their own devices most Americans would prefer mediation to adversarial litigation or adjudication.”<sup>21</sup>

Houlden, *et al.* compared preferences for procedures with different conditions of process and decision control, as well as cases involving equity or legal disputant orientations.<sup>22</sup> They found that disputants generally prefer procedures that place control over presentation of evidence in their hands, but leave the final decision to a third party. Latour, *et al.* examined disputant preference for autocratic decision-making, arbitration, a moot, mediation, and bargaining.<sup>23</sup> They found that while no method offered an ideal match, the average individual would prefer arbitration followed in order by moot, mediation, autocratic, and bargaining procedures.

Tyler, *et al.* compared pre-experience and post-experience evaluations with actual participants in court proceedings in three courts on different conflicts, not experiences with the same dispute. Their findings suggest that preference and choice should be viewed as reflecting different psychological processes.<sup>24</sup> The two main psychological models outlined included the relational and instrumental models. In the relational model, people are more worried about their social identity and implications for that identity based on their treatment during a conflict resolution experience. In the instrumental model, people care most about the favorability of their

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<sup>21</sup> Deborah R. Hensler, *Suppose It's Not True: Challenging Mediation Ideology*, J. DISP. RESOL. 81, 84 (2002).

<sup>22</sup> Pauline Houlden, Stephen LaTour, Laurens Walker, & John Thibaut, *Preferences for Modes of Dispute Resolution as a Function of Process and Decision Control*, 14 J. EXP. SOC. PSYCHOL. 13 (1978).

<sup>23</sup> Stephen LaTour, Pauline Houlden, Laurens Walker, & John Thibaut, *Some Determinants of Preference for Modes of Conflict Resolution*, 20 J. CONFLICT RESOL. 319 (1976).

<sup>24</sup> Tom R. Tyler, Yuen J. Huo, & E. Allan Lind, *The Two Psychologies of Conflict Resolution: Differing Antecedents of Pre-Experience Choices and Post-Experience Evaluations*, 2 GROUP PROCESSES AND INTERGROUP RELATIONS 99 (1999).

outcomes; they define this in terms of material gains and losses.<sup>25</sup> They found that before using a procedure, people tend to prefer procedures that will give them the most control over outcomes. However, after experiencing a procedure, people tend to care more about whether they were treated politely and with respect and whether the conflict resolution process gave them dignity; individuals seem to focus more on ideas of morality, justice, and social relationships when evaluating procedures after-the-fact.

Arnold and Carnevale conducted studies that factored in the effects of intentionality, expected future interaction, consequences, and power differences in matters of conflict.<sup>26</sup> Third-party procedures were preferred over consensual procedures when consequences in the dispute were high and wrongdoing was perceived as intentional. Their research also suggested that people involved in a conflict with someone of equal power were statistically significantly less likely to choose consensual procedures; while not statistically significant, they were somewhat more likely to choose more formal third party procedures than people engaged in a conflict with someone of a higher power. This work suggested that preference for mediation and dispute resolution could be affected by the power differences of parties involved and the intentionality of the dispute. A notable part of this study was that few individuals initially indicated they would choose mediation to resolve a dispute, but after being prompted with descriptions of procedures, many specified they would choose mediation.

Shestowsky points out that much of the social psychological research on disputant preferences is experimental work using student subjects whose preferences are examined *ex ante*

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<sup>25</sup> *Id.* at 100.

<sup>26</sup> Josh A. Arnold & Peter J. Carnevale, *Preferences for Dispute Resolution Procedures as a Function of Intentionality, Consequences, Expected Future Interaction, and Power*, 27 J. APPL SOC. PSYCHOL. 371 (1997).

and are based on hypothetical descriptions of procedures that subjects *have not experienced*.<sup>27</sup> She concluded, based on her own set of laboratory studies on preferences, that laypeople tend to prefer high disputant control in every area; they wanted a neutral third party to help them arrive at their own decision and no more.<sup>28</sup> They also preferred a high level of disputant control regarding the information that would be presented during the procedure without the help of a representative. In terms of setting the appropriate norms and rules for the dispute as distinguished from the procedure, participants wanted either medium or high disputant control. Shestowsky found that configurations representing an adjudicative model did not obtain a first choice rating by even ten percent of participants in any experiment she conducted with students. She suggests that one implication of these findings is that disputants prefer facilitative to evaluative mediation. In part, this might reflect changes in the preferences of student subjects who are a generation away from those in early experiments.<sup>29</sup>

In other words, *ex ante* procedural preferences may be shaped by insufficient information and experience.<sup>30</sup> For this reason, Shestowsky and Brett conducted a field study of civil disputants in Illinois, comparing their perceptions of procedures before and after they used adjudicative or non-adjudicative procedures.<sup>31</sup> Overall, disputants showed a preference for control over outcome, process, and substantive rules. These results reflect laboratory-based

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<sup>27</sup> Shestowsky 2008, *supra* note 1, at 606.

<sup>28</sup> Shestowsky 2004, *supra* note 1, at 243.

<sup>29</sup> Shestowsky 2004, *supra* note 1 at 248.

<sup>30</sup> Shestowsky 2008, *supra* note 1; Donna Shestowsky & Jeanne M. Brett, *Disputants' Perceptions of Dispute Resolution Procedures: An Ex Ante and Ex Post Longitudinal Empirical Study*, 41 CONN. L. REV. 63 (2008).

<sup>31</sup> Shestowsky & Brett.

studies, which strengthens the generalizability of prior procedural justice findings. They also found that the more attracted to third party control disputants were initially, the more satisfied they were if they ultimately used an adjudicative procedure. The converse was also true. Shestowsky and Brett recommend offering mandatory non-adjudicative procedures such as settlement conferences and mediation, implementing guidelines for how lawyers should inform their clients about procedural options, and involving disputants more directly in non-adjudicative procedures.

Shestowsky has conducted groundbreaking studies on disputants' preferences for elements of various processes in the context of civil litigation; unlike other researchers, she broke down processes of mediation, arbitration, and judge trial into specific features when collecting data on litigant preferences.<sup>32</sup> Shestowsky framed her empirical research using procedural justice; she contacted litigants shortly after their case was filed but *ex ante* in terms of their experience with processes. She sought to determine how attractive litigants found various legal procedures (e.g., negotiation, mediation, non-binding arbitration, binding arbitration, jury trials, judge trials). She examined whether demographic, case type, relationship, and attitudinal factors predicted their attraction to each procedure. Generally, she found that litigants preferred mediation, a judge trial, and attorneys negotiating with their clients present to all other examined procedures.

In a follow up study, Shestowsky again used the procedural justice paradigm, this time to examine the same litigants' perceptions and preferences regarding the individual characteristics of procedures – different possible options for how the dispute would be resolved, who would

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<sup>32</sup> Donna Shestowsky, *The Psychology of Procedural Preference: How Litigants Evaluate Legal Procedures Ex Ante*, 99 IOWA L. REV. 637-710 (2014) (the first multi-jurisdictional study *ex ante* of litigant perceptions).

decide or have input regarding the outcome, and the rules that would be used to shape or determine the outcome.<sup>33</sup> Overall, she found that litigants evaluated the characteristics in terms of control, that is, whether the process granted relative control to the litigants themselves or to third parties such as mediators or judges; she found litigants desired to be present for the process, yet preferred third-party control to litigant control, and particularly wanted *third parties to control the process as opposed to the outcome*.<sup>34</sup> Shestowsky unpacked the notion of third party control by examining preferences in relation to attraction to Mediation and Attorneys Negotiate with Clients Present, which she observed theoretically focus on party control.<sup>35</sup> She concluded that, *ex ante*, having a procedure that required the other litigant and lawyer present with a third party mediator may constitute third party control for these litigants. In general, her research supported early experimental findings that *ex ante*, before they experience procedures, litigants prefer third party control<sup>36</sup> over process, outcome, and decision rules. However, the older (and by inference more experienced) these litigants were, the less they were attracted to third party control.<sup>37</sup>

In sum, disputant preferences may be partly a function of what disputants understand about the features of various proceedings, which may also be a function of experience and

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<sup>33</sup> Donna Shestowsky, *How Litigants Evaluate the Characteristics of Legal Procedures: A Multi-Court Empirical Study*, 49 U.C. DAVIS L. REV. 793-841 (2016) (also providing a comprehensive review of the literature on *ex ante* field studies).

<sup>34</sup> *Id.* at 818-820.

<sup>35</sup> *Id.* at 820.

<sup>36</sup> *Id.* at 836.

<sup>37</sup> *Id.* at 830.

familiarity.<sup>38</sup> Unlike much experimental work, our dataset includes actual litigants, not students. Many of the study participants are experienced in OSHRC's civil enforcement system as the appellate body from Occupational Health and Safety Administration (OSHA) citations. A number of them are lawyers who are repeat players representing and closely aligned with institutional repeat players including OSHA and employers. Research on repeated experience and procedural preferences is very limited. Moreover, little research examines procedural justice perceptions in administrative adjudication or ALJs acting as mediators, whether in federal or state agencies. This is a significant arena in which the public experiences proceedings to address disputes. We conducted our surveys *ex post*, that is, after disputants had already experienced one or more procedures at OSHRC. Our review of the literature suggested the following first hypothesis:

H1: Higher levels of satisfaction with the fairness of process are associated with stronger preferences for mediation over adjudication.

Because our surveys were completed most often by experts rather than laypeople, our review of the literature suggested the following second hypothesis:

H2: Greater personal experience with mediation is associated with a greater preference for mediation over adjudication.

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<sup>38</sup> Shestowsky observes: "Whereas some studies conclude that litigants prefer adjudicative procedures granting relatively more control to third parties, others found that litigants favor nonadjudicative ones granting relatively more control to litigants. Shestowsky noticed these seeming discrepancies and posited that they might be explained by when in the dispute resolution trajectory attitudes are assessed. Specifically, she theorized that when disputants report their *ex ante* perceptions, they favor adjudicative options, but when they evaluate options *ex post* they prefer nonadjudicative ones." *Id.* at 820 (footnotes omitted).

#### *D. Repeat Players in Dispute Resolution and Adjudication*

Scholars have largely addressed the question of repeat players in judicial, arbitral, and other dispute resolution forums by examining outcomes or success. Scholars have suggested that success in any forum is a function of a variety of factors including the rules, the institutional facilities, and the nature of the parties.<sup>39</sup> In particular, institutional repeat players may fare better than one-shot players as a function of a variety of structural advantages, such experience leading to changes in how the repeat player structures the transaction. Repeat players can accumulate expertise, realize economies of scale, and develop informal continuing relationships with the people in the forum; they can develop a bargaining reputation and credibility, gain access to specialist counsel, and lobby for rules changes. One-shot players have more at stake in a given case, are more risk-averse, are not able to form continuing relationships with courts or institutional representatives, cannot use experience to structure future transactions, and may have limited access to specialist legal counsel. Such research generally examines repeat play strategic

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<sup>39</sup> Marc Galanter, *Why the "Haves" Come Out Ahead: Speculations on the Limits of Legal Change*, 9 LAW AND SOCIETY REV. 95-105 (1974); Carrie Menkel-Meadow, *Do the 'Haves' Come out Ahead in Alternative Judicial Systems?: Repeat Players in ADR*, 15 J. OF DISP. RESOL. 19-61 (1999).

advantage as to outcomes in arbitration<sup>40</sup> and court.<sup>41</sup> The confidentiality of mediation settlements may limit similar empirical studies.<sup>42</sup>

While Galanter's work is related to game theory, game theory also provides a different perspective on implications for single and repeat play between individual humans as

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<sup>40</sup> E.g., Lisa B. Bingham, *Employment Arbitration: The Repeat Player Effect*, 1(1) EMPLOYEE RIGHTS AND EMPT. POLICY J. 189-220 (1997) (finding a repeat player advantage in nonunion employment arbitration awards); Lisa B. Bingham, *McGeorge Symposium on Arbitration: On Repeat Players, Adhesive Contracts, and the Use of Statistics in Judicial Review of Arbitration Awards*, 29(2) MCGEORGE L. REV. 223-260 (1998) (examining nonunion employment arbitration awards); Alex J. S. Colvin, *An Empirical Study of Employment Arbitration: Case Outcomes and Processes*, 8(1) J. OF EMPIRICAL LEGAL STUDIES 1-23 (2011) (confirming a repeat player advantage in employment arbitration awards); J. Ryan Lamare and David B. Lipsky, *Employment Arbitration in the Securities Industry: Lessons Drawn om Recent Empirical Research*, 35 BERKELEY J. EMP. & LAB. L. (2015) (examining FINRA arbitration awards); J. Ryan Lamare, *Beyond Repeat Players: Experience and Employment Arbitration Outcomes in the Securities Industry*, in David B. Lipsky , Ariel C. Avgar , J. Ryan Lamare (ed.) MANAGING AND RESOLVING WORKPLACE CONFLICT, 22 ADVANCES IN INDUSTRIAL & LABOR RELATIONS 135-160 (2016) (examining between group and in-group experience and outcomes in securities arbitration); David Horton and Andrea Cann Chandrasekher, *Employment Arbitration after the Revolution*, 65 DEPAUL L. REV. \_\_ (2016 Forthcoming) (UC Davis Legal Studies Research Paper No. 443, available at SSRN: <http://ssrn.com/abstract=2637364>).

<sup>41</sup> E.g., John Szmer, Donald R. Songer, and Jennifer Bowie, *Party Capability and the US Courts of Appeals: Understanding Why the "Haves" Win*, 4(1) J. OF LAW AND COURTS 65-102 (2016), DOI: 10.1086/684487; Banks Miller, Linda Camp Keith, and Jennifer S. Holmes, *Leveling the Odds: The Effect of Quality Legal Representation in Cases of Asymmetrical Capability*, 49(1) LAW & SOCIETY REV. 209-239 (2015).

<sup>42</sup> E.g., Lisa B. Bingham, *Evaluating Dispute Resolution Programs: Traps for the Unwary*, LABOR AND EMPLOYMENT RELATIONS ASSOCIATION SERIES: PROCEEDINGS OF THE 59TH ANNUAL MEETING, 104-115 (2007).

distinguished from institutional repeat players in ADR. For example, in a single play situation, rational individual people often fail to cooperate even when it is in their best interest to do so. In the standard prisoner's dilemma, players pursue the highest individual gains and each ultimately decides to betray the other; in a one-shot game there is no opportunity to reward or punish so the rational decision is defection. Cooperation only results in a repeated game when reputations matter and each player has the opportunity to punish the other for previous decisions. In the case of OSHRC, repeat play may have implications beyond providing an advantage to one side over the other. If non-cooperation has negative consequences, reputational or otherwise, repeat experiences may encourage more cooperation during the proceeding and incentivize future compliance with safety regulations.

Another unique feature of the OSHRC dataset is that there is a defined and limited set of administrative law judges (ALJs) who handle both traditional administrative adjudications and Settlement Part mediations; at the time of data collection there were nine active ALJs distributed in regions across the country. No ALJ both mediates and adjudicates the same case. If the disputants fail to settle the dispute in mediation, a different ALJ is assigned to hear the case in an adjudicatory proceeding. This means that it is more likely for the disputants to encounter the same ALJ repeatedly and perhaps in different forms of proceedings.

While Shestowsky generally found litigants preferred mediation *ex ante*, there was a significant exception; she found that *repeat litigants* preferred binding arbitration more than first time litigants, and that this “was the only procedure for which attraction was significantly related to past litigation experience.”<sup>43</sup> She speculated that repeat litigants might realize that arbitration could favor them, or that they wanted to avoid protracted discovery. Because adhesive or forced

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<sup>43</sup> Shestowsky (2014), *supra* note 29 at 680.

arbitration clauses effectively keep people out of court, that may reduce the number of litigants who have experience with arbitration proceedings.

These studies report on litigant perceptions, not lawyers representing them. Lawyers representing institutional repeat players may identify closely with their clients' preferences. Clients may provide repeat business. Lawyers have inherently more control over process than the litigants they represent. Repeat player lawyers may have more experience with a wider variety of processes in a given forum. Moreover, in the case of litigation between companies and a federal agency, lawyers may be insiders and employees of the organization. In OSHRC cases, the OSHA is represented by the Solicitor of the Department of Labor. Employers may be represented by in-house or outside counsel.

#### *E. Administrative Law Judges, Settlement Judges, and Dispute Resolution*

The dispute system design at OSHRC uses settlement judges as mediators. Wall and Rude examined judicial mediation in state and federal courts and found that judges are unlike most other mediators in that they are more powerful than the disputants; they can undertake a variety of techniques including use of their power.<sup>44</sup> From surveys of judges, Professors Wall and Rude identified three strategies judges use in settlement conferences: the logical, aggressive and paternalistic strategies, each defined through a factor analysis that clustered specific judicial behaviors.<sup>45</sup> A survey of lawyers revealed that they believed the logical mediation strategy to be most effective; a factor analysis identified this strategy as suggesting a settlement figure after asking for lawyers' input, evaluating or analyzing the case for one or both parties, or suggesting

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<sup>44</sup> James A. Wall, Jr. and Dale E. Rude, *Judicial Mediation: Techniques, Strategies, and Situational Effects*, 41(2) J. OF SOCIAL ISSUES. 47-63 (1985).

<sup>45</sup> *Id.*

they split the difference. Lawyers believed that an aggressive judicial mediation strategy was least effective; this strategy included techniques where the judge coerces parties to settle, threatens a lawyer for not settling, and penalizes a lawyer for not settling.<sup>46</sup> Somewhere in between fell the paternalistic strategy, involving judges who meet with lawyers in chambers, talk to both lawyers together and separately about settlement, and call a certain figure reasonable. Interestingly, judges did not identify a client-oriented strategy, but the independent survey of lawyers found that they highly valued this approach, which included judicial attempts to enhance attorneys' relationship with clients, persuade clients to accept a settlement, and convince clients that they are receiving their day in court. However, a separate survey of judges and in-depth study of one judge's mediation cases indicated that the perceived and actual probability of settlement increased as the judge used more assertive techniques. This research suggests that the practice of settlement judges tends in the direction of evaluative mediation. More recent work by Robinson confirms some of these settlement techniques and mediation styles.<sup>47</sup>

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<sup>46</sup> *Id.* For descriptions of various behaviors by judges in settlement, see James A. Wall, Jr., Dale E. Rude, and Lawrence F. Schiller, *Judicial Participation in Settlement*, 1984(7) J. OF DISP. RESOL. 25-44 (1984); James A. Wall, Jr. & Dale E. Rude, *The Judge as Mediator*, 76 J. APP. PSYCHOL. 54-59 (1991) (referring to judicial behavior as assertive or non-assertive contrasted with aggressive).

<sup>47</sup> Peter Robinson, *Adding Judicial Mediation to the Debate about Judges Attempting to Settle Cases Assigned to Them for Trial*, J. DISP. RESOL. 335 (2006); Peter Robinson, *An Empirical Study of Settlement Conference Nuts and Bolts: Settlement Judges Facilitation Communication, Compromise, and Fear*, 17 HARV. NEGOT. L. REV. 97 (2012). *See also*, Stephen B. Goldberg, Margaret L. Shaw, and Jeanne M. Brett, *What Difference Does a Robe Make? Comparing Mediators with and without Prior Judicial Experience*, 25(3) NEGOTIATION J. 277 (2009) (finding that 1) for mediators who were and were not previously judges, confidence building was essential to success, and 2)

### III. THE RESEARCH SETTING

This study is unusual in that it is set in a federal administrative agency that is an appellate body and established one of the first dispute resolution programs for civil enforcement matters in the federal government, the Occupational Safety and Health Review Commission.

The U.S. Department of Labor's (DOL) Occupational Safety and Health Administration (OSHA) conducts safety and health inspections to insure compliance with The U.S. Occupational Safety and Health Act of 1970 (OSH Act). OSHA conducts approximately 93,000 inspections per year.<sup>48</sup> OSHA labels violations found during inspection as "serious," "willful," "repeat," "other," or "unclassified." Penalty structures are based on the type of violation. When an employer, employee, or a designated representative contests an OSHA ruling, the DOL forwards the case to the Occupational Safety and Health Review Commission (OSHRC), an independent quasi-judicial agency established by the OSH Act. In 2011, OSHRC docketed just over 3100 cases.

OSHRC was one of the first agencies to develop an innovative program providing alternative dispute resolution by agency Administrative Law Judges (ALJs) for cases involving civil enforcement. Initiated in 1999, OSHRC refers to this program as Mandatory Settlement Part.<sup>49</sup> OSHRC assigns cases to Mandatory Settlement Part if: (1) the proposed penalties are at

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process skills were more important for non-judge mediators, while the capacity to provide useful case evaluations was more important for judge mediators.

<sup>48</sup> Kilkon Ko, John Mendeloff, & Wayne Gray, *The Role of Inspection Sequence in Compliance with the US Occupational Safety and Health Administration's (OSHA) Standards: Interpretations and Implications*, 41 REGULATION & GOVERNANCE 48 (2010); OSHA (2011).

<sup>49</sup> See 29 CFR 2200.120, *et seq.*

least \$100,000; or (2) if the proposed penalties are at least \$30,000 *and* the violations are labeled as “repeat” or “willful.”<sup>50</sup>

The settlement judge assigned to the case has authority to issue a scheduling order and supervise discovery. Settlement judges also have the authority to “confer with the parties on subjects and issues of whole or partial settlement of the case and seek resolution of as many of the issues as is feasible;” to “require the parties to provide statements of the issues in controversy and the factual predicate for each party's position on each issue and may enter other orders...;” to “suggest privately to each attorney or other representative of a party what concessions his or her client should consider and assess privately with each attorney or other representative the reasonableness of the party's case or settlement position;” and to “convene and preside over conferences between the parties” either in person or by telephone, as well as discretion to engage in other settlement activities.<sup>51</sup> If the parties fail to reach an agreement while in Mandatory Settlement Part the case is assigned to a different judge for adjudication.

The agency also assigns ALJ's to adjudicate cases that are not initially set for mediation/ADR. The adjudication setting includes more formal guidelines for motions, pleadings

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<sup>50</sup> According to OSHA's website a “repeat” citation is issued when the employer fails to correct violations. A “willful” citation implies intention or knowing disregard: “The employer either knows that what he or she is doing constitutes a violation, or is aware that a hazardous condition existed and made no reasonable effort to eliminate it.” OSHA can impose penalties of up to \$70,000 for each repeat or willful violation (OSHA, 2012).

<sup>51</sup> See 29 C.F.R. 2200.120 (c) and (d).

and discovery in accordance with the Commission's Rules of Procedure.<sup>52:53</sup> These cases involve proposed penalties of over \$30,000 but less than \$100,000. Cited employers and employees may appear with or without legal counsel. The Secretary of Labor, OSHA's representative, bears the burden of proving the violation(s). After hearing all of the evidence on the case, the judge issues a written decision based on findings of fact and conclusions of law, affirming, modifying, or vacating the citations. In most cases, the ALJ decision is final. However, any one of OSHRC's three appointed Commissioners may decide to review the ALJ decision. When a review takes place, the OSHRC Commission issues its own decision superseding that of the ALJ. Decisions of the Commission may be appealed to the United States Court of Appeals.

Interviews with ALJs about the Settlement Part Program confirmed that as mediators they use facilitative and evaluative mediation styles, not transformative mediation.<sup>54</sup> While one judge preferred a traditional adjudication role to mediation, all the judges reported mediation strategies within the usual range, such as face-to-face meetings rather than telephone calls, encouraging

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<sup>52</sup> See Conventional Proceedings, 29 C.F.R., 2200.1 through 2200.108.

<sup>53</sup> Cases with proposed penalties of not more than \$30,000 are heard under another method, Simplified Proceedings (29 C.F.R. 2200.200 through 2200.211). Simplified Proceedings involve cases with relatively simple issues of law and fact and few citations. We do not focus on these cases or proceedings in this study.

<sup>54</sup> Lisa Blomgren Bingham, Deanna Malatesta, Susanna L. Foxworthy, and Timothy Reuter, DISPUTE RESOLUTION IN THE ADMINISTRATIVE PROCESS: EVALUATION OF THE OCCUPATIONAL SAFETY AND HEALTH REVIEW COMMISSION SETTLEMENT PART PROGRAM (2013), accessed at [http://www.oshrc.gov/publications/IU\\_Final\\_Report.pdf](http://www.oshrc.gov/publications/IU_Final_Report.pdf).

Washington, DC: Occupational Safety and Health Review Commission. For a review of research on transformative mediation in administrative proceedings at the U.S. Postal Service, see Lisa Blomgren Bingham, Cynthia J. Hallberlin, Denise A. Walker, and Won Tae Chung, *Dispute System Design and Justice in Employment Dispute Resolution: Mediation at the Workplace*. 14 HARV. NEGOT. L. REV. 1-50 (2009).

parties to consider what they really need, keeping proceedings less formal and less adversarial, using role-playing exercises to see a case from parties' different perspectives, avoiding hard and fast rules, attempting to enlarge the pie, using shuttle diplomacy, seating parties in proximity, and requiring both or all parties to submit a confidential pre-mediation statement.<sup>55</sup>

#### IV. METHODS

Methods included a mail survey and logistic regression analysis.

##### A. Survey

We conducted a mail survey during the Summer and Fall of 2012 to assess disputants' perceptions of fairness and to gauge levels of satisfaction with OSHRC's dispute resolution programs. We used the justice literature to construct our survey questions and followed the Dillman method to design our survey instrument and system of contacts.<sup>56</sup> Questions specifically

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<sup>55</sup> Bingham, *et al.* (2013) at 22.

<sup>56</sup> Don A. Dillman, Jolene D. Smyth, & Leah Melani Christian, *INTERNET, MAIL AND MIXED-MODE SURVEYS: THE TAILORED DESIGN METHOD* (3d ed. 2009). The survey design and implementation plan have a basis in theory and research. The Dillman method (also referred to as the total design method or TDM) is a set of techniques derived from social exchange theory and is considered the state of the art for survey research. The logic of the method is basic: Survey recipients are most likely to respond if they expect that the perceived benefits of doing so will outweigh the perceived cost of responding. Accordingly, every element of the questionnaire design and the survey implementation method is intended to address the perceived cost/ benefit calculus of the respondent. For example, the questionnaire is designed so that it is easy to read, interesting, and take a minimum amount of time. The respondent should have trust in its use and be convinced that his or her response is valuable. We used Dillman's total survey method for the design of the instrument and type and look of communications. Among other steps, we made efforts to make the survey look appealing, alerted participants in advance that the survey would be coming, participants notice in advance how long the survey would take, described confidentiality, and sent out reminders with different colors and types. These represent Dillman's ideas for optimizing response rate given any individual's

related to procedural justice for each form of proceeding (mediation and adjudication) included.<sup>57</sup>

- How satisfied were you with the level of control you had over the process?
- How satisfied were you with the fairness of the process?
- How satisfied were you with the process overall?
- How satisfied with the level of respect with which you were treated during the Settlement Part processes?
- How satisfied were you with the overall outcome of the case?

Our sample frame includes two groups of recent OSHRC disputants. The first group of disputants participated in the agency's Mandatory Settlement Part (mediation) between February 2011 and February 2012. All cases in this group involve potential penalties of at least \$100,000 *or* penalties of at least \$30,000 with "willful" or "repeat" violations. The second survey group participated in the agency's Conventional Proceedings (adjudication) between February 2011 and February 2012. To keep the groups as comparable as possible, we excluded disputants from both groups if they did not settle their dispute. We also narrowed the second group (adjudication) to include only cases with aggregate penalties between \$50,000 and \$99,000. We mailed 278 surveys in total (144 Mandatory Settlement Part/ Mediation; 134 Conventional / Adjudication) to all the disputants who met the above criteria and received 154 returns (55.4 percent); these include responses from Department of Labor Solicitors, Employee Representatives, and

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cost-benefit process for deciding to complete the survey. We were limited in the number of repeated contacts by OMB rules. A separate letter from OSHRC accompanied the initial mailing.

<sup>57</sup> The complete survey is on file with the authors and available upon request.

Employer Representatives. A detailed breakdown of the response rates is included in Appendix A and experience in Appendix B.

### *B. Preliminary Tests of Survey Responses*

In general, both groups were more satisfied than dissatisfied with fairness of process in their most recent proceedings. Among disputants who recently participated in mediation, about 86 percent reported they were either satisfied or very satisfied with the fairness of the process and about 14 percent reported they were either dissatisfied or very dissatisfied. Among disputants who recently participated in adjudication, 84 percent reported they were either satisfied or very satisfied with the fairness of the process and about 16 percent reported they were either dissatisfied or very dissatisfied. The raw numbers reveal that procedural justice is not strictly the domain of mediation. Disputants can be satisfied with fairness of process in either mediation or adjudication. A Pearson chi<sup>2</sup> test of association provides additional evidence that there is no statistically significant relationship between the disputants' most recent experience (mediation or adjudication) and reported perceptions of fair process ( $\chi^2(1)=0.0013, p =.97$ ).

We also asked recent participants of both programs if they *would have preferred* mediation.<sup>58</sup> Keeping in mind that preferences are reported ex post in our survey, among disputants who recently participated in mediation, about 73 percent expressed a preference for

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<sup>58</sup> The survey question for those who recently experienced mediation reads: "Do you agree or disagree with the statement: I would have preferred a trial on the merits." The survey question for those who recently experienced adjudication proceedings reads: "I would have preferred engaging in formal settlement processes before a settlement judge." We calculated the percentages after recoding response categories so that "strongly agree" and "agree" represent one category (*would have preferred* mediation) and "strongly disagree" and "disagree" represent a second category (*would not have preferred* mediation). The neutral responses (neither agree nor disagree) are not included calculations.

mediation, while about 27 percent expressed a preference for adjudication. Among disputants who recently participated in adjudication, about 65 percent expressed a preference for mediation, while about 35 percent expressed a preference for adjudication. These percentages suggest an overall preference for mediation over a trial on the merits *ex post*, regardless of the type of disputants' most recent experience (mediation or adjudication). A Pearson chi2 test of association provides additional evidence that reported preferences and recent proceeding type are not related ( $\chi^2(1)=2.687, p=.11$ ).

However, there is evidence that the perceived quality of the recent proceeding matters in disputants' stated preferences. Specifically, disputants who perceived their most recent experience, whether it was mediation or adjudication, to be fair, were also more likely to express a preference for mediation over adjudication ( $\chi^2(1)=79.000, p=0.00$ ; Fisher's exact  $p=0.000$ ).<sup>59</sup> In addition, if we know whether or not the disputant was satisfied or dissatisfied with his/her most recent proceeding we improve our ability to predict preferences by about 20 percent (Kendall's tau-b=.196).

Most survey respondents reported having previous experiences in both mediation and adjudication with the agency; this makes our survey unique in comparison to other reported surveys on disputant preferences. About 79 percent of respondents reported having participated in other mediation proceedings, while about 46 percent of respondents reported having participated in at least one trial on the merits. Moreover, disputants with more experience with

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<sup>59</sup> A Pearson chi2 test assumes a frequency count of at least 5 in each cell. To meet the assumption, for each chi2 test reported in this section we recoded the 5-item Likert responses into 2 categories: Responses "satisfied" and "very satisfied" =1, "dissatisfied" and "very dissatisfied" =0. The recoding provides the additional benefit of reducing measurement error. Neutral responses are not included in the analysis.

either procedure are more likely to prefer mediation: We used a one-way ANOVA to test for preference differences among disputants with different levels of experience. Measuring disputants' total experience (mediation and adjudication) on a five-point scale, preferences for mediation over a trial on the merits differ significantly by level of total experience,  $F(5, 84) = 2.92, p = 0.048$ .<sup>60</sup>

#### IV. RESULTS

We interpret the above results as preliminary evidence that disputants who perceive fair treatment in their recent cases will prefer mediation to more formal adjudication. In addition, the more total experience disputants have (including both adjudication and settlement judge mediation), the more likely they will express a preference for mediation. We turn to regression analysis to determine whether results hold when controlling for other factors, including differences in the proceedings.

##### *A. Regression*<sup>61</sup>

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<sup>60</sup> As to the level of experience with each proceeding type, the number of prior mediation experiences ranges from 0 to 5 (mode=2; mean=2.30), while the number of prior adjudication experiences ranges from 0 to 4 (mode =1; mean=2.18).

<sup>61</sup> Before combining responses of mediation and adjudication disputants, we determined that there were no outliers in the data by inspecting a boxplot. Using a Levene's test we also determined that our variances for the two groups were not statistically different Levene's test ( $p = .943$ ). Using the full range of Likert item responses, the means for the two groups are only slightly different. On a scale of 1-5, with 5 indicating stronger preferences for mediation, the mean response for those that recently participated in mediation is 3.25; the mean response for those that recently participated in adjudication is 3.32. Results of a one-way ANOVA test confirmed that the means for the two groups are not statistically different,  $F(1, 145) = .055, p = .815$ .

Our dependent variable is preference for mediation (*Pref\_Med*). We measure the dependent variable dichotomously, rather than use the 5-point range of values implied by our Likert-item response categories. This approach makes the most sense given the underlying data. Specifically, we observe that neutral respondents, those that neither agreed nor disagreed that they would have preferred mediation, also frequently settled their cases early in the dispute resolution process, often within 30 days from the day the case was docketed at the agency. Therefore, we do not want to assume neutral responses should take on the middle value of three on an ordinal scale that ranges one to five. Accordingly, the dependent variable takes on a value of one (1) or zero (0). We also construct the measure with and without neutral responses. When the dependent variable includes neutrals, the value of one is interpreted as the equivalent of *expressly indicating a preference for mediation*. (1= Respondents indicated either “agree” or “strongly agree” with the statement: “I would have preferred mediation over a trial on the merits.” 0= Respondents indicated either “disagree,” “strongly disagree,” or “neither agree nor disagree” with the statement “I would have preferred mediation over a trial on the merits.” We also construct the dependent variable by coding neutrals as missing so they are not considered in the results (1= Respondents indicated either “agree” or “strongly agree” with the statement: “I would have preferred mediation over a trial on the merits.” 0= Respondents indicated either “disagree” or “strongly disagree” with the statement “I would have preferred mediation over a trial on the merits. The latter measure is consistent with treating neutrals as a stage of pre-contemplation.<sup>62</sup>

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<sup>62</sup> Donald Hedeker & Robin J. Mermelstein, *A Multilevel Threshold of Change Model for Analysis of Stages of Change Data*, 33 MULTIVAR. BEHAV. RES. 427 (1998).

Our key independent variables include a proxy for procedural justice (*FP*) and a measure of the level of disputant experience (*EXP*). The variable *FP* is the respondent's reported level of satisfaction with fairness of process in his/her most recent dispute, whether in mediation or adjudication.<sup>63</sup> The variable *EXP* is a proxy for total experience. We measure total experience by counting all prior experiences the disputant had with mediation and adjudication.

We also include a set of controls to account for case assignment criteria, so the sample selection remains exogenous and to avoid selection bias associated with much of the previous research comparing mediation with other methods of resolution.<sup>64</sup> Specifically, we control for the amount in dispute and the type of violation, the main factors that determine assignment into different OSHRC dispute resolution programs. The variable *AMT* is the total dollar amount of proposed penalties associated with the disputant's most recent case. The variable *TYPE* indicates if the contested citations are safety or health violations that OSHA has characterized as either "willful" or "repeat." In alternative models, we also include a variable (*ADR*) to control for

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<sup>63</sup> We are aware of the advantages and disadvantages of different approaches to measuring the variables in our study. In the present study a single item measure is preferable. Very complex constructs can be ideal candidates for single-item measures and in fact can reduce error, compared to multi-item measures. First, a single-item provides the advantage of flexibility; the survey was administered to respondents with different backgrounds, roles and experiences and our measure allows different respondent types to consider only the aspects most relevant to them and to dismiss aspects not relevant. Also, for very complex constructs it may be impossible to cover every aspect of its makeup and therefore to achieve content validity. For a more complete explanation including the criterion for the application for single-item measures we refer readers to Christoph Fuchs & Adamantios Diamantopoulos, *Using Single Item Measures for Construct Measurement in Management Research*, 69 *DIE BETRIEBSWIRTSCHAFT* 2 (2009).

<sup>64</sup> See generally, *CONFLICT RESOL. Q.*, volume 22, number 1-2 in 2004.

unobserved differences in the procedures that differentiate the mediation and adjudication processes at the agency.<sup>65</sup>

We include the variable *EMPLOYEE* to assess the impact of participant role on preference for mediation. This variable is the basis for testing previous research finding that the relative power of the participants may influence disputant preferences.

Table 1 summarizes the variables, data sources, and key statistics.

[INSERT TABLE 1 ABOUT HERE]

### *B. Regression Analysis*

Given our binary dependent variable, logistic regression is appropriate for our analysis.<sup>66</sup> The logistic regression model produces a probability value between 0.0 and 1.0 to describe the probability of observing a preference for mediation ( $y=1$ ) given the set of explanatory variables. To facilitate comparison across models and interpretation, we report odds, *i.e.*, ratios of proportions for respective outcomes. We also report marginal effects, which are interpreted as the percentage point change in the probability of preferring mediation resulting from a discrete change in the explanatory variable. Table 2 includes the main results of our Logit regression model.

[INSERT TABLE 2 ABOUT HERE]

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<sup>65</sup> High collinearity is not a problem when we include all three variables (*AMT*, *TYPE*, and *ADR*) together in any of our equations. Although cases with proposed penalties of over \$100,000 are automatically assigned to mediation there are many cases assigned to mediation because they have willful or repeat penalties yet have aggregate penalties below \$100,000. Likewise, there are many cases in our sample that are assigned to adjudication with aggregate penalties near yet still under the \$100,000 threshold.

<sup>66</sup> J. Scott Long & Jeremy Freese, *REGRESSION MODELS FOR CATEGORICAL DEPENDENT VARIABLES USING STATA* (2d ed. 2006).

Referring to Table 2, the variables included in each model appear in the left-most column. Columns labeled “OR” report the odds ratios. Columns labeled “ME” indicate the marginal effects. The standard errors reported in the table use the Huber/White heteroscedasticity-consistent estimator of variance. The first model (columns 1a and 1b) includes 84 observations as any cases with neutral responses for the dependent variable are coded as missing. To keep the case-to-variable ratio within guidelines we keep the model parsimonious, including only the two main predictors (fairness of process<sup>67</sup> and experience) and one variable to control for the case type/ selection into mediation or adjudication.<sup>68</sup> A second model (columns 2a and 2b) of 142 observations, the main predictors (fairness of process and experience) plus controls for case type and participant role. A third model of 142 observations includes the main predictors and a full set of controls (columns 3a and 3b). Likelihood ratio chi2 tests are indicated at the bottom of each column; in all models the *p values* associated with the LR test suggest the predictors are jointly significant; thus, all three models are superior to their counterparts with only intercepts. The main predictors (satisfaction with fairness of process and experience) are also statistically significant in all three models, suggesting the results are robust to alternative specifications. Looking across models, it is clear that results hold whether or not we include neutral responses in our dependent variable measure (comparing model 1 with models 2 and 3).

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<sup>67</sup> Fairness of outcome was not examined in any of the models as the DV of interest was preference for process and fairness of outcome strongly correlates with fairness of process.

<sup>68</sup> David W. Hosmer, Jr. & Stanley Lemeshow, *APPLIED LOGISTIC REGRESSION* (2d ed. 2000).

For interpretations, we focus on model 2 as statistical tests indicate this model provides the best fit, Wald  $\chi^2(5)=12.44$ ,  $p=.032$ .<sup>69</sup> The utility of the model is further supported by classification accuracy (69 percent). Since we hypothesized directional relationships, we report results using a one-tailed test for statistical significance. In model 2, satisfaction with fairness of process is statistically significant ( $p <.001$ ). Thus, when disputants felt the process was fair in their most recent case, they were also more likely to indicate a preference for mediation over adjudication. In addition, experience is also statistically significant ( $p <.05$ ). Thus, the more experience disputants have with different procedures, the more likely they will prefer mediation over adjudication. Comparing results in model 3 with model 2, note that experience (*EXP*) is not significant if measured dichotomously (model 3: 1= prior experience with either program; 0= no prior experience), but it is statistically significant when the measure (*EXP\_ALL*) is a count of all prior mediation and adjudication experiences (model 2).

In model 2, the variable *TYPE* is also statistically significant ( $p <.10$  using a one tailed test) and the direction of the relationship is negative, suggesting disputants with cases involving repeat or willful violations are more likely to prefer adjudication. Since model 2 includes cases with neutral responses we also include a variable indicating whether the case settled early in the program. The variable *EARLY\_SETTLE* is a control; its coefficient is statistically significant ( $p <.001$ ) but not substantively meaningful. The highest Variance Inflation Factor (VIF) is 2.04

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<sup>69</sup> To determine best fit we use Stata's "Fitstat" command. The differences in BIC across models provide positive support for model 2 over models 1 and 3. In alternative equations (not shown) we added an interaction term (multiplying fairness of process by experience) and also added a variable to indicate whether the most recent experience was mediation or adjudication. In each case the statistic provides support for model 2 over all others.

and the average VIF is 1.8 indicating collinearity is not a problem in any of the models. Models controlling for individual judges do not alter interpretations in any meaningful way.

### *C. Specific Probability Estimates*

Because logistic regression models are nonlinear, the magnitude of the change in the outcome probability that is associated with a given change in any independent/explanatory variables depends on the levels of all the independent variables. Therefore, to put our findings into better perspective, we calculate more specific probability estimates and display the results in Table 3. The estimates in table 3 tell us more about the combination of conditions that lead disputants to prefer mediation over adjudication and vice versa.

[INSERT TABLE 3 ABOUT HERE]

As noted in Table 3, there is a 71 percent probability a disputant will prefer mediation over a trial on the merits if he/she is also satisfied with the fairness of process in the most recent proceeding (line1). To obtain this calculation, we held all other variables at their means. The probability increases to its maximum value if we hold experience to three or more and also set the case type so that willful and repeat violations are not included.<sup>70</sup> Specifically, there is an 88 percent probability that a disputant will prefer mediation over a trial on the merits if the following set of conditions is met: The disputant is satisfied (or very satisfied) with the fairness of the most recent proceeding AND the disputant has at least three prior experiences AND the most recent case does not involve a willful or repeat violation (line 5). By comparison we observe the lowest probability (13 percent) that a disputant will prefer mediation over a trial on

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<sup>70</sup> We choose to set experience to a value of 3 or more to obtain the probability estimates when disputants have experience in both mediation and adjudication, since our data confirms that all respondents with three or more prior experiences also have experience with both types of proceedings.

the merits when the disputant is dissatisfied with the fairness of the most recent proceeding AND the disputant also has no prior experience (line 3).

Table 3 also reveals an interesting nuance about the impact of experience in predicting preferences for mediation: If the disputant is satisfied with the fairness of the most recent proceeding, the probability of observing a preference for mediation only increases by one percentage point (from .71 to .72) when we factor in experience (Compare probability of  $y=1$  on line 1 with line 2). However, experience is a more important factor in predicting preferences among those who are dissatisfied with the fairness of process in their most recent experience; dissatisfied disputants with no prior experience express a preference for mediation over adjudication only 13 percent of the time (line 3). Yet, dissatisfied disputants with at least three prior experiences express a preference for mediation about 38 percent of the time (line 4). Thus, if a disputant is satisfied with the fairness of process, more experience is not likely to alter that disputant's preference for mediation very much. However, if a disputant was dissatisfied with the fairness of process in the most recent dispute more experience may make mediation more appealing.

Table 3 also clarifies the relatively marginal importance of case type and intentionality in predicting preferences. In this analysis, case type refers to willful and repeat violations, both of which imply intentionality. Recall that case type was statistically significant in two of three regressions (Table 2, models 2 and 3). The probability of observing a preference for mediation ( $y=1$ ) over a trial on the merits was reduced by about 10 percentage points when case involves serious or repeat violations (see marginal effect for *TYPE* in Table 2). Table 3 provides additional evidence that disputants are more likely to prefer adjudication over mediation when the dispute involves intentionality, but the substantive effect remains moderate. A disputant

expresses a preference for a trial on the merits ( $y=0$ ) over mediation about 58 percent of the time under the following conditions: The violation is labeled repeat or willful AND the disputant is dissatisfied with the fairness of process in the most recent proceeding AND the disputant has at least three prior experiences (line 7). The probability increases only about 5 percent (from 53 percent to 58 percent) for dissatisfied, experienced disputants when case type is changed (compare  $y=0$  on line 6 with line 7).

## V. DISCUSSION

These results make two substantial contributions to the literature. First, we directly measure preferences for administrative adjudication (similar to litigation) and settlement judge mediation (a form of ADR) and relate these preferences to perceptions of procedural justice before OSHRC, a federal administrative agency responsible for appeals of civil enforcement actions. We find that the higher the perceptions of procedural justice as to process, the greater the preference for use of mediation.

Second, we examine the relationship of experience with administrative adjudication and settlement judge mediation to disputant preference for mediation. A noteworthy aspect of our survey is that most respondents have experience with both mediation and adjudication programs at OSHRC. Although we asked disputants to focus on their most recent experience with OSHRC when completing the survey, we believe that respondents with multiple experiences are in a unique position to assess that experience from a broader perspective than those without prior experiences. These are repeat players who are also likely to have future interactions with the relatively small pool of OSHRC ALJs. We find that the more total experience disputants have in the OSHRC dispute system design (including both adjudication and settlement judge mediation), the greater their preference for mediation. The coefficients are statistically and substantively

significant despite a relatively small sample size. The results are also robust to various alternative specifications.

Our study has limitations. We focus on programs with one federal agency, the Occupational Safety and Health Review Commission. The agency handles appeals of workplace safety violations associated with OSHA inspections. Thus, results may not be generalizable to other agencies, the courts, or other types of disputes. Nonetheless, OSHRC handled more than 3000 appeals in the year 2011 and their proceedings affect virtually all employers and employees in the United States. We also did not, as Shestowsky recommends, break down the various processes into more specific elements or features of procedures about which to survey disputants. In addition, the use of settlement judges as mediators means that there will be some variability in the nature of mediation style and practice.

However, our findings confirm other studies finding evidence of a disputant preference *ex post* for mediation over a more rights-based adjudicatory process such as arbitration or an adversarial trial-type procedure. They also confirm findings that, after personally experiencing settlement judge and adjudication processes, disputants prefer mediation. This is consistent with logic underlying the group value model and the idea that group identity shapes attitudes towards justice-related attitudes. The pattern also suggests a possible explanation for the seeming inconsistency in previous research between laboratory studies and field studies. Laboratory studies find a preference for more adjudicatory processes *ex ante* and field studies conducted *ex post* find some evidence for a preference for mediation and adjudication. This inconsistency may to some degree reflect a lack of personal experience with the different processes. Laboratory subjects are judging based on descriptions without experience, while field subjects are judging based on personal experience. These findings support Shestowsky's call for more longitudinal

research on disputant preferences for dispute resolution processes and for research on the features of various procedures.

## VI. CONCLUSION

State and federal administrative agencies have increasingly turned to the use of mediation in the context of civil enforcement of public law. It requires a systematic and intentional process to evaluate disputant preferences to enhance the design of these systems. Our survey design and methods for analysis are consistent with this objective. Findings are relevant to policymakers designing public justice systems. Moreover, listening to disputants and acknowledging their concerns is a key to the legitimacy of, as well as the respect for, mediation programs.<sup>71</sup> This is especially important since many courts and agencies have mandated various forms of nonbinding dispute resolution.<sup>72</sup> Our findings are consistent with research on the *ex post* preferences of disputants who experience adjudicatory and nonadjudicatory procedures in the civil justice system. The findings confirm that disputants with more experience in various procedures, who may be individual repeat players or agents of institutional repeat players, prefer nonadjudicatory to adjudicatory procedures. This finding suggest that mandating nonbinding dispute resolution such as mediation may be appropriate in that disputants who experience the processes tend to prefer them in the final analysis. Building a body of experience with mediation will help institutionalize processes that may assist courts and administrative agencies with limited resources in managing burgeoning caseloads.

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<sup>71</sup> Tom R. Tyler, *WHY PEOPLE OBEY THE LAW: PROCEDURAL JUSTICE, LEGITIMACY, AND COMPLIANCE* (1990).

<sup>72</sup> Shestowsky & Brett, *supra* note 27.

Table 1: Variable Descriptions and Summary Statistics

<i>Variable</i>	<i>Description</i>	<i>Obs</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
PREF_MED	1= “strongly agree” and “agree” (express preference for mediation over adjudication); 0=“strongly disagree,” “disagree,” and “neither agree nor disagree” (no express preference for mediation over adjudication)	149	.38	.49	0	1
FP	1=“Were you satisfied with the fairness of the process”? Responses were collapsed into two categories. “very satisfied” and “satisfied”; 0=“dissatisfied,” “very dissatisfied,” and “neither satisfied nor dissatisfied” (no express level of satisfaction).	149	.38	.48	0	1
EXP_ALL	count of all previous experiences with mediation and adjudication over the last five years from OSHRC records.*	149	5.21	1.11	0	9
EXP	alternative measure for experience; 1= respondent reported previous participation in at least one case in which there was trial on the merits.**	149	.19	.13	0	1
EMPLOYEE	1= most recent case experience was as Employee or Employee Representative (attorney or non-attorney); 0= Employer or Department of Labor Solicitor.	147	.13	.30	0	1
EMPLOYER	Alternative measure of participant role; 1= most recent case experience was as an Employer or Employer Representative (attorney or non-attorney); 0 = Employee or Department of Labor Solicitor.	147	.63	.48	0	1
ADR	1= most recent experience is ADR; 0 =most recent experience is adjudication.	152	.51	.50	0	1
AMT	total proposed penalties (in thousands) associated with disputant’s most recent case (OSHRC records).	147	97.00		3.45	980
TYPE	1= most recent case involves either serious or willful violations, 0 otherwise.	152	.22	.16	0	1
COMPLEX	alternative measure of case characteristics. Respondents described cases as: disagreed that violation occurred; disagreed on fine amount; dispute about abatement period; dispute about violation type; other; higher values =more aspects of case in dispute.	152	2.61	1.25	0	5

*\*Measure was checked against responses to several survey questions asking about experience with different OSHRC programs including mediation and adjudication; \*\*The responses were checked against OSHRC records to include only those that completed a trial in the last 5 years.*

Table 2: Logit Results: Predicting Preference for Mediation

DV	OR		ME		OR		ME	
	(1a)	(1b)	(2a)	(2b)	(3a)	(3b)	(3a)	(3b)
FP	3.004*** (1.341)	.252***	2.951*** (1.313)	.245***	3.707*** (1.828)	0.293***		
EXP_ALL	1.115*** (.0477)	.025***	1.213*** (0.104)	.044***	1.095** (0.0569)	0.0210**		
EXP					1.424 (0.773)	0.061		
EMPLOYEE					1.080 (0.474)	0.177		
EMPLOYER			1.107 (0.422)	0.023				
EARLY_SETTLE			0.166*** (.111)	.004***	0.124*** (.113)	.003***		
ADR					2.003 (0.977)	0.150		
COMPLEX					0.980 (0.167)	-0.004		
AMT(log)					0.771 (0.195)	-0.059		
TYPE	0.629 (.299)	-0.109	0.630* (.251)	-0.102*	0.374* (0.259)	-0.226*		
Constant	1.53 (.094)		0.144 (0.088)		1.630 (4.676)			
LR chi2	10.16		10.69		13.89			
Prob> chi(2)	0.013		0.030		0.034			
Observations	84	84	142	142	142	142		

Robust standard errors in parentheses;

Significance of one-tailed test: \*\*\* p<0.01, \*\* p<0.05, \* p<.10

Table 3. Predicted Probabilities for Ideal Types and Outcome of Interest <sup>+</sup>

<i>Line</i>	<i>Type</i>	<i>Probability of Preferring Mediation (y=1)</i>	<i>Probability Preferring Adjudication (y=0)</i>
1	Satisfied with fairness of the process in most recent dispute	.71	.29
2	Satisfied with fairness of the process in most recent dispute; At least 3 prior experiences	.72	.28
3	Dissatisfied with fairness of the process in most recent dispute; No prior experience	.13	.87
4	Dissatisfied with fairness of the process in most recent dispute; At least 3 prior experiences	.38	.61
5	Satisfied with fairness of the process in most recent dispute; At least 3 prior experiences; Case does not involve a willful /repeat penalty	.88	.11
6	Dissatisfied with fairness of the process in most recent dispute; At least 3 prior experiences; Case does not involve willful /repeat penalty	.46	.53
7	Dissatisfied with fairness of the process in most recent dispute; At least 3 prior experiences; Case involves willful /repeat penalty	.41	.58

<sup>+</sup> Probabilities are based on respondents expressed preference for mediation with the help of a settlement judge over a trial on the merits. Disputants expressed their preferences *ex post*, after their most recent dispute. Includes all disputants who recently participated in mediation or adjudication process at OSHRC.

Appendix A. Response Rates by Category

	Mandatory Settlement		Conventional	
	No.	Percent of Total Responses	No.	Percent of Total Responses
Mailed by Proceeding	144		134	
Responses by Respondent Type				
Rep. of Employer -non attorney	8	10.26%	7	9.21%
Rep of Employer-attorney	37	47.44%	40	52.63%
Solicitor for DOL	23	29.49%	22	28.95%
Authorized Employee Representative (Union)	7	8.97%	4	5.26%
Attorney for Authorized Employee Representative	3	3.85%	1	1.32%
Other	0	0.00%	2	2.63%
Total Responses	78		76	
Response Rate by Proceeding	54.17%		56.72%	

Appendix B. Respondents's Experience

	Mandatory Settlement Part Respondents	Conventional Case Respondents
What OSHRC programs have you participated in?		
Simplified	41%	56%
Conventional Case through Mandatory Settlement	87%	71%
Conventional Case resolved with a trial	41%	47%
Conventional Case resolved without a trial	63%	71%
Total respondents who participated at least once in Simplified Proceedings (formerly called EZ Trial)*	49%	57%
Total respondents who participated at least once in OSHRC Conventional Case that settled through Mandatory Settlement Part*	88%	68%
Total respondents who participated at least once in an OSHRC Conventional Case that resolved with a trial*	43%	48%
Total respondents who participated at least once in an OSHRC Conventional Case that resolved without a trial*	62%	70%

\* Response categories included zero times, one time, 2-5 times and more than 5 times. Chart above includes all that did not respond "zero times"