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The Influence of Procedural and Distributive Variables on Settlement Rates in Employment Discrimination Mediation

Dr. E. Patrick McDermott & Dr. Danny Ervin***

I. INTRODUCTION

Mediators and scholars are interested in factors that contribute to a successful mediation. The settlement of the dispute is one measure of success. If one could identify certain key process or outcome variables that caused more disputes to be settled in mediation, a mediator could use this information to maximize settlement potential. We seek to add to this search for the “holy grail” of mediation settlement.¹

Using an extensive database from the evaluation of the Equal Employment Opportunity Commission (EEOC) we attempt to determine whether certain procedural and distributive factors are significant predictors of case resolution. We also examine whether other factors, such as whether a party was represented at the mediation, are correlated with resolution of the dispute.

A. Literature Review

Kochan and Jick propose that in public sector labor mediation, “the more aggressive the style of the mediator, the more effective the mediation process.”² Lim and Carnevale find that “mediator tactics that are seen as leading to successful conflict resolution in one dispute are seen as irrelevant or even detrimental in a

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2. Thomas A. Kochan & Todd Jick, *The Public Sector Mediation Process: A Theory and Empirical Examination*, 22 J. CONFLICT RESOL. 209, 219 (1978).

different dispute.”³ Lim and Carnevale observed that “mediators who facilitated communication and provided clarifications and insights are most likely to achieve settlement.”⁴

Shapiro, Drieghe, and Brett analyzed why certain mediators are more successful than others.⁵ The study is based on self reported data from five mediators for 327 grievance mediations.⁶ The study found that while four of the five mediators varied their behavior and tactics across the mediations “all were about equally successful in settling grievances.”⁷

Thoennes and Pearson analyzed the factors that predict outcomes in divorce mediation.⁸ They found that “the most heavily weighted predictors were related to perceived mediator behavior—specifically to the role of facilitating communication, and providing clarification and insight.”⁹

Henderson notes that “[f]or the majority of researchers in mediation, however, the most challenging issue to date has been understanding the factors which explain mediation effectiveness.”¹⁰ He then adopts the argument that effectiveness is best measured by settlement rate.¹¹ Henderson observes that it “remains unclear why some disputes subjected to mediation settle and why other disputes subjected to mediation end up in court.”¹² He notes that the research to date by legal scholars, social scientists, and behavioral theorists, has resulted in “largely contradictory” results.¹³

Henderson proposed three constructs that he believes “pervade the literature” to explain mediation outcome for disputes in the construction industry.¹⁴ These

3. Rodney G. Lim & Peter J.D. Carnevale, *Contingencies in the Mediation of Disputes*, 58 J. PERSONALITY & SOC. PSYCHOL. 259, 259 (1990).

4. Douglas A. Henderson, *Mediation Success: An Empirical Analysis*, 11 OHIO ST. J. ON DISP. RESOL. 105, 115 (1996) (summarizing Lim & Carnevale’s findings); Lim & Carnevale, *supra* note 3, at 260.

5. Debra Shapiro et al., *Mediator Behavior and the Outcome of Mediation*, 41 J. SOC. ISSUES 101, 114 (1985).

6. *Id.* at 101.

7. *Id.*

8. Nancy A. Thoennes & Jessica Pearson, *Predicting Outcomes in Divorce Mediation: The Influence of People and Process*, 41 J. SOC. ISSUES 115, 115-126 (1985).

9. *Id.* at 124.

10. Henderson, *supra* note 4, at 108.

11. *Id.* at 107-08 (citing Lim & Carnevale, *supra* note 3, at 267).

12. *Id.* at 105.

13. *Id.* at 124.

14. *Id.* at 108. Henderson relied on the following literature: Jeanne M. Brett & Stephen B. Goldberg, *Grievance Mediation in the Coal Industry: A Field Experiment*, 37 INDUS. & LAB. REL. REV. 49 (1983) (labor mediation); Jean M. Hiltrop, *Factors Associated with Successful Labor Mediation, in MEDIATION RESEARCH: THE PROCESS AND EFFECTIVENESS OF THIRD-PARTY INTERVENTIONS* 241 (Kenneth Kressel et al. eds., 1989); Jean M. Hiltrop, *Mediator Behavior and the Settlement of Collective Bargaining Disputes in Britain*, 41 J. SOC. ISSUES 83 (1985) (labor mediation); Kochan & Jick, *supra* note 2, at 209, 211 (labor mediation); Craig McEwen & Richard J. Maiman, *Mediation in Small Claims Court: Achieving Compliance Through Consent*, 18 L. & SOC’Y REV. 11 (1984); Craig A. McEwen & Richard J. Maiman, *The Relative Significance of Disputing Forum and Dispute Characteristics for Outcome and Compliance*, 20 L. & SOC’Y REV. 439 (1986) (small claims mediation); Shapiro et al., *supra* note 5, at 101 (coal union mediation); Thoennes & Pearson, *supra* note 8, at 119-121 (divorce mediation); Neil Vidmar, *An Assessment of Mediation in a Small Claims Court*, 41 J. SOC. ISSUES 127 (1985); Neil Vidmar, *The Small Claims Court: A Reconceptualization of Disputes and an Empirical Investigation*, 18 L. & SOC’Y REV. 515 (1984). See also Henderson, *supra* note 4, at 107 n.6.

three constructs are situational factors, mediator characteristics/interventions, and the procedural status of the dispute.¹⁵ Situational factors in Henderson's model include the intensity of the dispute, party characteristics (ability to pay, motivation to settle, unrealistic expectations), type of dispute (value, payment, charges), length and complexity of the dispute, and number of parties in the dispute.¹⁶ The second construct is mediator characteristics, including intervention techniques employed (aggressiveness and diversity of techniques), demographic characteristics (age, experience, and functional specialization), and the overall quality of the mediator(s).¹⁷ The third construct, the procedural aspects of the mediation, included the timing of the dispute, the amount of discovery used in the mediation, the source of the request for mediation (i.e. mandatory or not) and the rules used to guide the process.¹⁸

Henderson then examined over 500 mediations in the construction industry to identify the determinants of mediation success.¹⁹ Henderson used regression analysis (LOGIT) to determine if a set of independent variables drawn from the three constructs discussed above influenced the outcome of the mediation.²⁰ The independent variables that entered the final model were amount in controversy, length of mediation in days, number of techniques used by the mediator, mediator quality as perceived by the parties, extent of discovery used by the parties, and the rules used by the parties.²¹ This model correctly classified 86% of the cases that settled and 63% of the cases that did not settle.²² Important to Henderson was that "relatively few variables enter[ed] the model," with two from each of the three conceptual areas of situation, mediator, and procedure entering the model.²³

Concerning mediator conduct, Henderson found that the diversity of mediation strategies was positively related to the settlement of construction disputes.²⁴ He found that the one variable that was the best predictor of settlement was the rules used by the parties.²⁵ When parties used their own rules, they usually settled the case.²⁶ This finding highlighted the importance of the procedural aspects of mediation.

B. Our Study

Our analysis focused on independent variables relating to procedural due process, substantive due process (distributive), and a few other variables that did not fit into our procedural/substantive classification. We tested whether these variables influenced the mediation settlement rate. We first identify the various variables that we used to measure participant satisfaction with the mediation.

15. Henderson, *supra* note 4, at 108.

16. *Id.*

17. *Id.* at 113.

18. *Id.* at 118.

19. *Id.* at 106.

20. *Id.* at 135.

21. *Id.* at 141.

22. *Id.* at 142-43.

23. *Id.* at 143.

24. *Id.* at 144.

25. *Id.* at 145.

26. *Id.*

After introducing the results of this research, and these variables, we then use the same variables to measure whether they influenced the settlement rate.

C. The Procedural Justice Variables

We seek to identify if certain measures of procedural justice influence settlement. Procedural justice can be defined as “the perceived fairness of the process through which decisions are made”²⁷ The theory of procedural justice posits “disputants prefer procedures that provide them with voice, control over the outcome, and fair treatment by the third party.”²⁸ Lind, Kanfer, and Early note that early theories of procedural justice associate one’s voice in the process with one’s belief about the instrumental consequences of that input.²⁹ More recent theories explain procedural justice as resulting from the symbolic and informational consequences of the procedures rather than the procedure’s capacity to provide good outcomes.³⁰ Under either concept of procedural justice, parties to a dispute must first be given a fair chance to voice their concerns. Second, parties must have control over the outcome of mediation since mediation is about self-determination. Third, the mediator must be perceived as (and be) fair and neutral.

An element of procedural justice is “knowing participation,” i.e., participant understanding of the process. Research in organizational theory has shown that “understanding is an important factor in employee attitudes towards organizational activities.”³¹ Hence, understanding of the process is essential for participant satisfaction with the process and for their perception that the process was fair.³²

The “timing of mediation” and “representation” are two other important variables that affect procedural justice.³³ Prompt scheduling of a program is considered to be an indication of effective program management. The timing of mediation is important since one of the touted advantages of mediation is that it is less time consuming than other methods of dispute resolution.³⁴ Once the case is referred to mediation, and if it takes place promptly (i.e., before positions harden), a “settlement may be more likely.”³⁵

Procedural justice requires that there is opportunity for assistance to the participants. Representation in the form of either attorneys or other knowledgeable persons, for one or both parties, may serve to balance power.³⁶ It is important not

27. Michael E. Gordon, *Grievance Systems and Workplace Justice: Tests of Behavioral Propositions About Procedural and Distributive Justice*, 40 INDUSTRIAL REL. RES. ASS’N SERIES 40TH ANN. PROC. 390, 390 (1988).

28. See JOHN THIBAUT & LAURENS WALKER, *PROCEDURAL JUSTICE: A PSYCHOLOGICAL ANALYSIS* 1 (1975); Jeanne M. Brett et al., *The Effectiveness of Mediation: An Independent Analysis of Cases Handled by Four Major Service Providers*, 12 NEGOTIATION J. 259, 259-69 (1996).

29. E. Allan Lind et al., *Voice Control, and Procedural Justice: Instrumental and Noninstrumental Concerns in Fairness Judgments*, 59 J. OF PERS. & SOC. PSYCH. 952, 952 (1990).

30. *Id.*

31. James H. Dulebohn & Joseph J. Martocchio, *Employee Perceptions of the Fairness of Work Group Incentive Pay Plans*, 24 J. OF MGMT. 469, 470 (1998).

32. See *id.* at 470.

33. Ann C. Hodges, *Mediation and the Americans with Disabilities Act*, 30 GA. L. REV. 431 (1996).

34. See Cindy Cole Ettingoff & Gregory Powell, *Use of Alternative Dispute Resolution in Employment-Related Disputes*, 26 U. MEM. L. REV. 1131, 1141 (1996).

35. See Hodges, *supra* note 33, at 470.

36. *Id.* at 482-484.

only to let the participants know that they can bring in representatives, but also to notify each party as to who will be representing the other party.³⁷ There is empirical evidence to support the notion that when one party to a dispute appeared with an unanticipated representative, the other party was concerned about the fairness of the process.³⁸

Mediator conduct is also important to the procedural due process aspects of mediation. One of the commonly included criteria in the definitions of mediation is that the mediator be (or be perceived to be) neutral or impartial.³⁹ Welton and Pruitt observe that while neutrality often contributes to successful mediation, it is not a *sine qua non* for success.⁴⁰ Some researchers point out that “neutrality, as traditionally practiced, actually includes two potentially conflicting qualities: (1) impartiality, which refers to the mediators’ ability to maintain an unbiased relationship with the disputants; and (2) equidistance, which involves the mediator temporarily becoming aligned with each party to encourage disclosure and assist the party in expressing the case.”⁴¹ Mediators must be impartial, fair, and diligent in order to foster trust between the parties and between the mediator and the parties. They must also maintain the confidentiality of the parties.⁴²

D. Distributive Justice

Distributive justice measures include participant satisfaction with the outcome of mediation and participant perceptions regarding outcome. Here participants believe that they have received their fair share of the available benefits.⁴³ These questions dealt with whether or not the party believed that they had obtained the results they wanted from the mediation.

E. The Importance of Procedural vs. Distributive Justice

The importance of procedural justice to participant satisfaction has been documented.⁴⁴ It is not enough for one to believe that they “won” their dispute. Thus, Gordon, in his study of the issues of justice in a union-management grievance procedure, emphasized the importance of procedural justice in workplace dispute resolution.⁴⁵ He argued “research on grievances will remain incomplete lacking the perspectives of employees who are themselves subject to the grievance

37. *Id.* at 484.

38. *Id.*

39. Donald T. Weckstein, *In Praise of Party Empowerment and Mediation Activism*, 33 WILLAMETTE L. REV. 501, 509 (1997). See also Gary L. Welton & Dean G. Pruitt, *The Mediation Process: The Effects of Mediator Bias and Disputant Power*, 13 PERSONALITY & SOCIAL PSYCHOLOGY BULLETIN 123, 123 (1987); Kochan & Jick, *supra* note 2, at 211.

40. Welton & Pruitt, *supra* note 39, at 123.

41. Weckstein, *supra* note 39, at 509 n.26 (citing Janet Rifkin et al., *Toward a New Discourse for Mediation: A Critique of Neutrality*, 9 MEDIATION Q. 151 (1991)).

42. Ettingoff & Powell, *supra* note 34, at 1142-43.

43. See Morton Deutsch, *Justice and Conflict*, in *The Handbook of Conflict Resolution* 41 (Morton Deutsch & Peter Coleman eds., 2000).

44. See Lisa B. Bingham et al., *Exploring the Role of Representation in Employment Mediation at the USPS*, 17 OHIO ST. J. ON DISP. RESOL. 341, 346 (2002); Dulebohn & Martocchio, *supra* note 31, at 470-71.

45. Gordon, *supra* note 27, at 390-397.

system.”⁴⁶ Gordon used a five-point Likert scale that ranged from “Very Satisfied” to “Very Dissatisfied” to survey employees’ overall satisfaction with the grievance system. He found that the overall evaluation of the grievance system was significantly correlated with the measures of perceived procedural and distributive justice. He also found that the correlation was significantly higher for the procedural justice factors as opposed to the distributive justice factors. Thus, his research seemed to support the findings of Folger and Greenberg⁴⁷ that the “procedures followed, rather than the outcomes obtained, have the greater influence on the overall evaluation of dispute-resolution systems.”⁴⁸

We now use these measures to determine whether the presence, or absence, of procedural due process and distributive variables are related to whether or not the dispute is settled.

F. The Database

We used two databases that were drawn from surveys returned by charging parties and respondents in mediation. Our EEOC database for charging parties consists of 687 mediated cases. We excluded 142 cases from our database due to missing variables. Of the remaining 687 cases, there were 542 cases that were settled voluntarily at mediation; 145 cases were not resolved. Our second database was for respondents in mediation. The second database consisted of 584 settled cases and 139 cases that were not resolved. We excluded 106 cases with missing variables.

II. RESEARCH METHODOLOGY

A. Sampling Plan and Response Rate

The participants were the charging party—an employee or ex-employee, and the respondent—the employer or ex-employer. The population for this research included all participants in the EEOC mediation process that was conducted under the supervision of the fifty EEOC field offices for a period of about five months. The comprehensive survey design means that sampling techniques were not used.

The researchers surveyed all EEOC district offices. During this five month period all field offices were instructed to provide the survey to all mediation participants for completion and to return the completed surveys in a sealed envelope to the researchers.

B. Data Collection Procedures

Data collection was performed through a survey. To maximize feedback, the parties were asked to fill out the survey at the conclusion of the mediation. The

46. *Id.*

47. Robert Folger & Jerald Greenberg, *Procedural Justice: An Interpretive Analysis of Personnel Systems*, in 3 RESEARCH IN PERSONNEL & HUMAN RESOURCES MANAGEMENT 141 (Kendrieth M. Rowland & Gerald R. Ferris eds., 1985).

48. Gordon, *supra* note 27, at 394.

surveys were given to the mediators for distribution at the conclusion of the mediation session. A protocol addressing the handling of the surveys was carefully constructed and was distributed to all district office alternative dispute resolution (ADR) coordinators and to all mediators in advance. According to the protocol, mediators were asked to inform the parties at the beginning of the session about the survey and to distribute the survey to the parties at the conclusion of the session. The mediators left the room while the surveys were being completed. Whenever possible, the participants were separated, allowing them to complete the surveys in two different rooms. After the participants received the survey, they were asked to complete it, place it in an envelope, and seal it to ensure confidentiality. Mediators were then asked to forward the surveys in the sealed envelopes to the local ADR coordinator along with the other required documentation about the mediation. The local ADR coordinators were asked to mail the surveys once a week directly to the research team. In order for the researchers to measure the non-response bias, mediators or field office ADR coordinators were also asked to indicate when participants did not fill out the survey.

C. The Participant Satisfaction Survey

The survey used was developed to measure the satisfaction of the parties with the EEOC mediation process. The survey was a twenty-two item survey that included fourteen, five-point Likert-type responses ranging from strongly disagree (1) to strongly agree (5). A Likert scale was used because there is evidence that it is superior to other measurement formats in measuring attitudes, and its underlying factorial structure is more stable across situations and cultures.⁴⁹ Of the remaining eight questions, five were primarily “yes or no” questions, two were open-ended questions, and one was a multiple-choice question. The first open-ended question gave participants who did not resolve their claim a chance to explain why they thought there was no resolution of their charges. The second open-ended question allowed participants the opportunity to offer suggestions for improving the mediation process. The multiple-choice question sought to identify the mediation status of the participants. A pretest established that, for most participants, the survey took about five minutes to complete.

Since the survey is an original measure, there are no prior reliability and validity figures. It has construct validity since its items measured the various elements of participant satisfaction with the mediation process. The survey was carefully constructed to ensure that the questions were properly worded.

D. Data Analytical Techniques

The data was analyzed using Microsoft Excel and SAS. The data analytical techniques of this study were LOGIT and ordinary least squares (OLS) analysis. We examined the relationship between procedural and distributive justice variables and the outcome of the mediation. The outcome of the mediation was the

49. See Neal M. Ashkanasy, *Rotter's Internal-External Scale: Confirmatory Factor Analysis and Correlation with Social Desirability for Alternative Scale Formats*, 48 J. OF PERSONALITY & SOC. PSYCHOL. 1328 (1988).

dependent variable and a dichotomous variable. Logistic regression analysis is the appropriate modeling technique for dichotomous outcomes. The LOGIT model was the proper model to evaluate any issue with a dichotomous dependent variable as is found in this research. The dependent variable cannot be greater than one or less than zero because this research examines a choice that is modeled as one or zero. Ordinary least squares (OLS) allow the model to produce dependant variables greater than one and/or less than zero. The LOGIT analysis produces a model that contains the dependant variable between zero and one.

E. Results

There were 1683 completed surveys from the charging parties and 1572 completed surveys from the respondents. These numbers include only properly-completed questionnaires. As discussed earlier, in cases where the protocol and the instructions were not strictly followed, the questionnaires were excluded from the final sample. From these questionnaires we examined the mediated cases and developed our Charging Party and Respondent databases.

III. THE INDEPENDENT VARIABLES—PARTICIPANT FEEDBACK REGARDING THE MEDIATION

The survey questions regarding participant feedback were comprised of two major areas of evaluation: procedural and distributive elements. Questions concerning procedural elements included statements about mediation preparation, comprehension of the process, voice (i.e., opportunity to present views), and the mediator's role and conduct.

Participant satisfaction with the distributive elements of mediation was measured using four questions concerning the results. More specifically, three questions were asked about participant attitudes regarding the realistic nature of the options developed during the mediation, their satisfaction with the fairness of mediation, and their satisfaction with the results.⁵⁰ The fourth distributive question was a "yes/no" question concerning whether the participants obtained what they wanted from the mediation. With the exception of this question, all other distributive and procedural questions discussed above were measured using a Likert scale with a continuum of one to five, one representing strong disagreement and five representing strong agreement.

A. Procedural Elements and Mediation

Four statements were used to measure the participants' satisfaction with the mediation process. Of these, the first two were "pre-mediation session" or "mediation preparation" statements regarding whether the participants received an adequate explanation from an EEOC representative and whether the session was

50. We recognize that one may disagree with the classification of option generation as a distributive measure. Our logic here is that the generation of options implies some mediator expression of what "ought to be" and thus can be seen as a distributive measure. Also, participant dissatisfaction with the options provided is probative of the distributive results of the mediation.

scheduled promptly. The next two statements asked whether the participants understood the process and had an opportunity to present their views.

Table 1 reflects the participant satisfaction with the procedural elements of the mediation on a Likert scale of one to five with five indicating strong agreement.

TABLE 1
Participant Satisfaction with the Procedural Elements of Mediation*

Statements	Charging Parties	Respondents
	Mean (n, %)	Mean (n, %)
Procedural Elements:		
Explanation, Scheduling, and Voice		
Prior to my attendance at this mediation session today, I received an adequate explanation about mediation from an EEOC representative.	4.24 (1637, 88.3%)	4.21 (1516, 85.4%)
The mediation was scheduled promptly.	4.28 (1673, 87.7%)	4.39 (1559, 90.5%)
After the mediator's introduction, I felt that I understood the mediation process.	4.35 (1676, 91.6%)	4.53 (1561, 95.8%)
I (or my representative) had a full opportunity to present my views during the mediation process.	4.39 (1677, 89.8%)	4.57 (1563, 95.0%)

* Satisfaction is measured by the "mean responses" of the participants on a Likert scale—scale of 1 (strongly disagree) to 5 (strongly agree)—and by the percentage of participants who agreed or strongly agreed with the statements. The sample size (n) is also given for evaluation purposes. Figures in bold refer to statements where a statistically significant difference (evaluated at 95% confidence level) exists between the mean responses of the charging parties and respondents.

B. The Mediator

The second set of questions regarding procedural due process focused on statements regarding the mediator's performance. More specifically, participants were asked whether the mediator understood their needs, helped to clarify their needs, remained neutral in the beginning as well as throughout the process, helped to develop options for the resolution of their claim, and used procedures that were

fair to them.⁵¹ Table 2 reflects the participant satisfaction with the procedural elements of the mediation on a Likert scale of one to five with five indicating strong agreement.

TABLE 2
Participant Satisfaction with the Procedural Elements of Mediation*

Statements	Charging Parties Mean (n, %)	Respondents Mean (n, %)
Procedural Elements: Mediator		
The mediator understood my needs.	4.30 (1669, 86.4%)	4.31 (1552, 86.9%)
The mediator helped clarify my needs.	4.25 (1665, 84.4%)	4.17 (1504, 79.3%)
At the beginning of the mediation, I considered the mediator to be neutral.	4.44 (1674, 92.1%)	4.49 (1566, 92.0%)
The mediator remained neutral throughout the session.	4.42 (1664, 90.7%)	4.43 (1564, 89.1%)
The mediator helped the parties develop options for resolving the charge.	4.27 (1661, 85.1%)	4.23 (1545, 83.9%)
The procedures used by the mediator in the mediation were fair to me.	4.33 (1668, 88.5%)	4.44 (1564, 91.8%)

* Satisfaction is measured by the "mean responses" of the participants on a Likert scale—scale of 1 (strongly disagree) to 5 (strongly agree)—and by the percentage of participants who agreed or strongly agreed with the statements. The sample size (n) is also given for evaluation purposes. Figures in bold refer to statements where a statistically significant difference (evaluated at 95% confidence level) exists between the mean responses of the charging parties and respondents.

C. Distributive Elements and Mediation

The third set of questions addressed the "bottom line" issues of participant satisfaction with the outcome of the mediation process. Three statements measured the distributive elements. The first statement concerned the realistic nature of the solutions developed during the mediation, and the other two regarded participant satisfaction with the fairness of mediation and with the results of the mediation.

51. While Henderson found that mediator ability influenced the settlement rate, he did not look at these particular measures of the mediator's performance. See Henderson, *supra* note 4.

In addition to the three distributive measures, the survey also sought to measure whether the participants obtained what they wanted from mediation. This is a strong distributive measure. The participants were first asked whether they knew, before going into mediation, what they wanted from mediation. They were then asked if they obtained what they wanted from the mediation. Table 3 is a presentation of participant satisfaction by distributive elements. The significant variables are set forth in bold.

TABLE 3
Participant Satisfaction with the Distributive Elements of Mediation*

Statements	Charging Parties	Respondents
	Mean (n, %)	Mean (n, %)
Distributive Elements		
Most of the options developed during the mediation session were realistic solutions to resolving the charge.	3.95 (1648, 75.2%)	4.00 (1519, 75.6%)
I was satisfied with the fairness of the mediation session.	4.07 (1648, 78.9%)	4.31 (1559, 86.9%)
I was satisfied with the results of the mediation.	3.38 (1547, 54.8%)	3.67 (1477, 62.6%)

* Satisfaction is measured by the “mean responses” of the participants on a Likert scale—scale of 1 (strongly disagree) to 5 (strongly agree)—and by the percentage of participants who agreed or strongly agreed with the statements. The sample size (n) is also given for evaluation purposes. Figures in bold refer to statements where a statistically significant difference (evaluated at 95% confidence level) exists between the mean responses of the charging parties and respondents.

D. Other Independent Variables

We then sought to determine if these variables influenced the settlement rate. In addition to the procedural and distributive variables discussed above, we also considered the independent variables of whether the charging party or respondent was represented at the mediation and whether the parties were willing to participate in EEOC’s mediation in the future.⁵²

52. While one could classify legal representation as a procedural variable and the willingness to participate again as a distributive measure we have classified these as outside of the procedural/distributive dichotomy.

IV. SUMMARY OF INDEPENDENT VARIABLES

The independent variables used in our analysis are set forth in Table 4.

Table 4
Independent Variables

Parameter	Explanation
CHGQ1	Received an adequate explanation about mediation from an EEOC representative.
CHGQ2	The mediation was scheduled promptly.
CHGQ3	After the mediator's introduction, I felt that I understood the mediation process.
CHGQ5	I (or my representative) had a full opportunity to present my views during the mediation process.
CHGQ11	Most of the options developed during the mediation session were realistic solutions to resolving the charge.
CHGQ12	Satisfaction with the fairness of the mediation session.
CHGQ13	Represented by an attorney or other during the mediation.
CHGQ14a	Willingness to participate in EEOC's mediation program in the future.
RSPQ1	Received adequate explanation about the mediation from the EEOC representative.
RSPQ2	The mediation was scheduled promptly.
RSPQ3	Understood the mediation process.
RSPQ5	I (or my representative) had a full opportunity to present my views during the mediation process.
RSPQ11	Most of the options developed during the mediation session were realistic solutions to resolving the charge.
RSPQ12	Satisfaction with the fairness of the mediation session.
RSPQ13	Represented by an attorney or other during the mediation.
RSPQ14a	Willingness to participate in EEOC's mediation program in the future.

V. THE DEPENDENT VARIABLE—SETTLEMENT

Our dependent variable was whether the mediation was successfully resolved (i.e. “settlement”). This information was obtained from the charging party and respondent surveys. We used LOGIT for this analysis.

A. *The Research Results*

We first ran the LOGIT model to determine which of our independent variables was correlated with settlement. This model included both the settled and unresolved mediations. Logistic analysis has many similarities to ordinary least squares (OLS) analysis, but one of the differences is in accessing the goodness of fit. There is no statistic that is analogous to the R-squared statistic in an OLS analysis. There are a number of pseudo-R-squared measures derived from the likelihood tests and this analysis uses the Max-rescaled R-Square. This statistic is derived using the Nagelkerke proposal.⁵³

VI. SETTLEMENT RATE

A. *Charging Party and Settlement*

Using a LOGIT analysis and a stepwise method we allowed an independent variable to enter the model and remain in the model if the variable was significant at the ten percent level. We found four significant parameter estimates for these independent variables. Table 5 contains the results of the charging party analysis. Two of the variables had a positive correlation—the development of options that were realistic solutions (CHGQ11) and the charging party’s willingness to participate in the mediation program in the future (CHGQ14a).

Two of the variables had a negative correlation—satisfaction with the fairness of the mediation (CHGQ12) and representation by an attorney or other party in the mediation (CHGQ13). The option development and fairness measures were distributive variables. The other two, attorney representation and willingness to participate in the future were additional variables that we did not classify as procedural or distributive. The Max-rescaled R-Square = 0.1688 for the charging party analysis. This statistic is interpreted to mean that our model will forecast the correct category (settled, not settled) approximately seventeen percent of the time.

53. N.J.D. Nagelkerke, *A Note on a General Definition of the Coefficient of Determination*, 78 BIOMETRIKA 691, 691-92 (1991).

TABLE 5
Charging Party Results

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > Chi Sq
Intercept	1	0.0802	0.7122	0.0127	0.9104
CHGQ11	1	0.7384	0.1164	40.2289	<.0001
CHGQ12	1	-0.2696	0.1315	4.2050	0.0403
CHGQ13	1	-0.4680	0.2030	5.3163	0.0211
CHGQ14a	1	1.1897	0.3845	9.5748	0.0020

B. Respondents and Settlement

For respondents there were 584 settled cases, 139 unresolved cases and 106 cases excluded due to missing variables. Table 6 contains the results from the LOGIT analysis of the respondent data. The Max-rescaled R-Square = 0.2220 for the respondent analysis. This statistic is interpreted to mean that our model will forecast the correct category (settled, not settled) approximately 22% of the time.

For the respondents, one variable was positively correlated with settlement of the case—the development of options that were realistic solutions (RSPQ11). Three variables were negatively correlated with resolution—receipt of an adequate explanation about the mediation from an EEOC representative (RSPQ1), understanding the mediation process (RSPQ3), and satisfaction with the fairness of the mediation session (RSPQ12). Thus two distributive variables (option development and perception of fairness) and two procedural variables (adequate explanation and understanding of the process) influenced respondent settlement rate.

TABLE 6
Respondent Party Results

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > Chi Sq
Intercept	1	1.2321	0.7329	2.8261	0.0927
RSPQ1	1	-0.3318	0.1464	5.1323	0.0235
RSPQ3	1	-0.4052	0.1905	4.5211	0.0335
RSPQ11	1	1.2040	0.1340	80.6962	<.0001
RSPQ12	1	-0.2905	0.1626	3.1929	0.0740

VII. ANALYSIS

The development of realistic solutions by the mediator and satisfaction with the fairness of the mediation session, two distributive variables, are key factors identified by both the charging parties and respondents as assisting in the settlement of the dispute. While satisfaction with the fairness of the mediation is important, we note that it should be expected in a settled case and arguably is a by-product of settlement. However, of more interest is the mediator development of realistic options. The quality of the intervention technique of option generation, a measure which is related to the overall quality of the mediator, was the best predictor of settlement. This result indicates that mediator skill does influence settlement and underscores that mediator skill can be a key factor in the resolution of disputes in mediation. While we characterized this as a distributive variable in our model, it fits as easily into Henderson's model as a mediator characteristic, specifically as an intervention technique.⁵⁴ This adds to Lim and Carnevale's observation that facilitating communication and providing clarification and insights were most likely to achieve settlement.⁵⁵ It may well be argued that quality option generation does provide such clarification and insight. One may also argue that option generation is an evaluative tactic and that it is the quality of the evaluative option generating which contributes to settlement. This then would suggest that quality evaluative mediator conduct is a valued process.

We find it interesting that for those mediations involving an attorney(s) at mediation, a situational factor, for charging parties with representation this factor reduces the chance of resolution of the dispute at mediation. This could be because charging parties' use of counsel indicates that the case is valued higher and thus may not be amenable to resolution at the EEOC pre-investigation level, because counsel is a barrier to resolution, or may even signal that the mediations resulted in unrepresented charging parties compromising their claims and that the presence of counsel prevents the charging party from "settling cheap." Additional research is necessary to better understand this dynamic.⁵⁶ One interesting question is whether those charging parties who do not settle early will later receive a larger settlement offer or otherwise obtain significantly more money than those who settle early without counsel.

In sum, we found that the likelihood of settlement at mediation significantly correlated with both parties reporting that the mediation was perceived to be fair and the mediator was perceived to have generated realistic options. We also found that charging party representation, but not respondent representation, was likely to reduce the chance of settlement.

54. Henderson, *supra* note 4, at 144 (noting the diversity of measures undertaken by the mediator was positively related to settlement of construction disputes).

55. See generally Lim & Carnevale, *supra* note 3.

56. We note that others have found that the presence of counsel or other representation may reduce settlement rates and have offered their own theories as to why this dynamic occurs. See Kenneth K. Stuart & Cynthia A. Savage, *The Multi-Door Courthouse: How It's Working*, 26 COLO. LAW. 13, 13-17 (1997); BARRIERS TO CONFLICT RESOLUTION (Kenneth Arrow et al. eds., 1995). For an interesting study of the role of representation in a union-management context, see Bingham et al., *supra* note 44.

