Quantifying the Quality of Mediation Agreements

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Abstract

For workplace mediation programs, success is most often measured by assessing the agreement rate. However, it is unlikely that all signed agreements are of equal quality. Starting with the principle that the ''success'' of a mediation program cannot be limited to its agreement rate, we designed a study to assess the quality of mediation agreements. This article uses a questionnaire based on a five-dimension framework (mediator's usefulness, procedural justice, satisfaction with agreement, confidence in agreement, and reconciliation between parties) to conduct a cluster analysis of a sample of agreements from a governmental mediation program. Three types of agreement are identified: disappointing, satisfactory, and value-added agreements. The study's theoretical contributions as well as its practical implications for mediators and mediation programs are discussed.

Introduction

In recent years, the growing body of articles and books on organizational conflicts as well as the numerous conferences and training seminars organized around this theme illustrate the interest in managing interpersonal conflict at work. Whether it is on an individual level (conflict between a supervisor and an employee) or organizational level (project teams, departments, etc.), the resolution of workplace conflicts is attracting much attention from managers. Since they are responsible for maintaining a cordial

work environment, supervisors generally desire a settlement that satisfies the parties and promotes reconciliation (Conlon, 2005).

From this perspective, mediation seems the perfect tool to resolve conflicts in the workplace (Bingham, 2004). However, despite the enthusiasm, mediation is now at a turning point in terms of theory (Moore, 2003). The theoretical framework for workplace mediation suffers from a lack of empirical proof and, in particular, a lack of adequate measurement tools. This is especially true with mediation outcomes, which are poorly measured from a psychometric perspective. This absence of evaluation tools is hindering the evaluation of dispute resolution programs, and mediation's success is commonly measured by whether or not participants reach an agreement (Donohue, Lyles, & Rogan, 1989; Hollett, Herrman, Eaker, & Gale, 2002; Irving & Benjamin, 1992).

Our research objective is therefore twofold: (a) to propose a valid tool for measuring the results of mediation in the context of program evaluation and (b) to better characterize workplace mediation agreements. The results will enable us to move beyond a simple agreement rate to assess the quality of agreements reached.

Evaluating Mediation Outcomes

A number of studies have sought to measure ''success'' in mediation, which is to say the results produced, partly to observe the impact of certain factors such as the level of initial conflict (Mareschal, 2005) and the experience of the mediator (Kochan & Jick, 1978) on the success of mediation. In general, success is often measured solely on the basis of the agreement reached between the two parties. Therefore, a signed agreement is synonymous with ''successful'' mediation and mediations that did not lead to an agreement are seen as ''failures'' (Hollett, Herrman, Eaker, & Gale, 2002). However, are all agreements of equal quality?

This question highlights the simplistic aspect of measuring the success of mediations in a dichotomous way: agreement versus no agreement. Some mediations end in an agreement, but the pressure exerted on one of the parties is such that a party might think the agreement was ''forced'' because it was signed under coercion. It is clear that, in this case, mediation leaves a bitter taste in the mouth of this party. As a result, the disappointed party may not be motivated to respect the agreement. Moreover, it is likely a latent conflict waiting to emerge at the first opportunity as the frustrated party may seek revenge. Is such an agreement a quality agreement? Can we truly consider this to be a successful mediation? Consequently, no one can claim to have done an exhaustive evaluation of mediation outcome where reaching an agreement is the only success criterion considered (Hollett et al., 2002).

Our study postulates that it is essential that we step outside the ''agreement versus no agreement'' box. We believe that quality dimensions must also be weighed to assess mediation agreements. In fact, we assume that, even if the mediation concludes in an agreement, its overall quality varies depending on these dimensions. Mediation agreements should therefore be studied multidimensionally, as a number of studies have highlighted the importance of evaluating the procedural and relational aspects of mediation in addition to results directly related to the agreement (Conlon, 2005).

Multidimensional Conceptualization of the Quality of Agreement

Measuring the qualitative aspect of mediation agreements is not a new idea. In fact, several authors have addressed this issue (Conlon, 2005; Duffy, 1991; Hollett et al., 2002; Kressel & Pruitt, 1985; Pruitt, Peirce, McGillicuddy, Welton, & Castrianno, 1993). A review of the scientific literature on evaluating mediation indicates that there are several ways of evaluating an agreement's quality. The problem is that there is no instrument developed specifically for program evaluation. Measurement instruments in the literature are not concise enough to fit the constraints of evaluating mediation outcomes in an organizational context.

In order to build a simpler mediation outcome evaluation model, we review the scientific literature to pinpoint the common outcome dimensions. More specifically, we pay closer attention to four classic studies (i.e., often cited) as well as one more recent study. These studies were selected because they aimed specifically or at least in a major part at proposing a mediation outcome survey.

The first study is by Kressel and Pruitt (1989); it identifies six general categories for mediation results: The satisfaction of the parties [with the process]; the settlement rate [signing of an agreement]; the nature of the agreements; the application rate for the agreement; efficiency [cost in time and money]; and improvement in the climate following mediation. The advantage of this study is that it shows that a mediation's success involves more than simply measuring satisfaction with the agreement.

The second study focused on results is the study by Pruitt, Peirce, Zubek, Welton, and Nochajsky (1990). These authors take a less general perspective, maintaining that mediation results can be categorized according to 10 dimensions: reaching an agreement; achievement of fixed goals; the agreement's clarity and feasibility; parties' satisfaction with the agreement; parties' satisfaction with the conduct of the hearing; parties' perception of procedural justice; parties' perception of support by the mediation service; compliance with the agreement; long-run quality of the relationship between the parties; and, lastly, the absence of new problems between parties. The advantage of the study is that it inventories the various dimensions that can be used to assess the quality of a mediation agreement.

The third typology of mediation results is the typology put forward by Lim and Carnevale (1990). After doing a confirmatory factor analysis of data from a sample of 255 professional mediators, these researchers sorted the mediation results into three categories: The settlement (i.e., agreement), results for the mediator (i.e., process) and, finally, improvement of the relationship between the parties. The complete list of outcome factors of this study is reported in Table 1. In their study, Lim and Carnevale suggest grouping the various dimensions into three major categories, providing a framework for grouping the various dimensions of a mediation agreement.

In a fourth study, the 1993 review of mediation by Wall and Lynn groups results into five categories: agreement signed or not signed; improvement to relations between the parties; fairness and the "compromise" aspect of the agreement; compliance to the agreement; and the parties' overall satisfaction with the process. While the study groups the dimensions of evaluation on which there is a consensus, it does not put forward

Table 1
Comparison of Mediation Outcomes Across Five Studies

|	Kressel and Pruitt (1989)	Pruitt et al. (1990)	Lim and Carnevale (1990)	Wall and Lynn (1993)	Hollett et al. (2002)
Process/ mediator			- Feelings of trust toward mediator - Mediator's needs, goals satisfied		- Mediator empathy - Pressure to agree - Satisfaction with mediator
Process/ fairness	- User satisfaction - Efficiency of the process	- Disputant satisfaction with the conduct of the hearing - Disputant perceptions of procedural fairness - Disputant support of the mediation service	- Parties satisfied with mediation - Settled in reasonable time	- Parties' satisfaction with the process	- Interactional justice - Procedural justice - Clarity
Agreement/ satisfaction	- Nature of the agreement	- Whether agreement is reached - Goal achievement - Disputant satisfaction with the agreement	- Dispute settled - Mutually beneficial settlement - Agreement felt to be their own - Overall success - Underlying core conflict resolved - Number of issues reduced - Distance in position narrowed	- Settlement/ agreement - Compromise from positions - Fair agreement	- Satisfaction with mediation result - Distributive justice
Agreement/ implementation	- Rate of settlement - Rate of compliance	- Clarity and apparent feasibility of the agreement - Compliance with the agreement	- Resources gained/recovered - Nothing ambiguously stated - Lasting agreement reached - No adverse political ramifications - No future problem expected	- Compliance to agreement	
Relationship	- Improvement of post dispute climate	- Long-run quality of the relationship - Absence of new problems between the parties	- Interparty relation improved - Parties learned to communicate	- Improved current relationship - Prevention of future dispute	- Relationship change - Conflict resolved
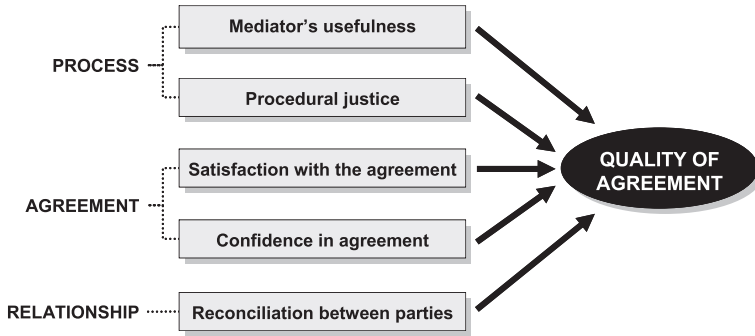
Figure 1. Framework for evaluating workplace mediation.

any quantitative scale of measurement for assessing the qualitative dimension of mediation.

Finally, the study by Hollett et al. (2002) on the development of an instrument for assessing court and community-based programs uses 10 dimensions: distributive justice; interactional justice; procedural justice; clarity [understanding of the issues at stake]; mediator empathy; pressure to agree; satisfaction with mediator; satisfaction with mediation [results]; relationship change; and conflict resolved. Unfortunately, the study does not use an exploratory factor analysis or confirmatory analysis to purify or validate the suggested scales. Moreover, the scales are reported to be highly correlated ($r = .55$ to .70), suggesting that scales could be combined into a smaller number of factors.

Comparison of these five studies allows us to boil down five core dimensions for assessing the qualitative aspect of mediation. These dimensions are: mediator's usefulness, procedural justice, satisfaction with agreement, confidence in agreement, and reconciliation between parties. Table 1 compares mediation outcomes across studies as related to the five core dimensions.

Focusing on five dimensions facilitates a straightforward model that captures the core qualitative dimension of mediation agreements. Such a simple model offers a practical advantage for program evaluation. Furthermore, we can group these dimensions in three factors. Figure 1 illustrates the five-dimensional model used to evaluate the quality of agreements.

Mediator's Usefulness
The first dimension of the process factor is mediator's usefulness. Parties' level of satisfaction with regard to the process is strongly dependent on their assessment of the mediator's usefulness in advancing the discussions (Moore, 2003). In fact, parties who are satisfied with the mediator are generally satisfied with the process as well (Kressel & Pruitt, 1989). A mediator can make an effective contribution to advancing discussion by ensuring that order and well-being are respected during negotiation; respecting confidentiality; putting forward a bargaining agenda; and by suggesting potential solutions to be explored with parties.

Procedural Justice

The second dimension of our qualitative model is procedural justice. Many authors see the parties' satisfaction with the mediation process as one of the essential criteria for successful mediation (Kressel & Pruitt, 1985; Roehl & Cook, 1985). The parties' satisfaction with the mediation process includes three aspects: distributive justice, interactional justice, and procedural justice (Pruitt et al., 1989; Thibaut & Walker, 1975). Studies indicate that the perception of procedural justice occupies a particularly important place in evaluating the mediation process (Pruitt et al., 1993). Consequently, we will concentrate on procedural justice, which is the degree to which the parties believe mediation has occurred in a fair and equitable way. Parties' satisfaction with the process is generally highly valued by the latter, even where mediation produced no agreement (Kressel & Pruitt, 1985).

Satisfaction With Agreement

Naturally, parties' satisfaction with the agreement they just negotiated is an essential criterion for mediation's effectiveness (Kressel & Pruitt, 1985). In fact, this is the dimension that is most frequently used in assessing the qualitative aspect of mediation results. In this respect, all studies in our literature survey feature this variable. Mediation is deemed to achieve a high level of satisfaction with an agreement, and to produce more satisfying agreements than other dispute settlement processes such as arbitration (Brett, Barsness, & Goldberg, 1996).

Confidence With Agreement

Reaching an agreement is one thing. Implementing it is another. Will the parties comply with the agreement? Post-mediation implementation is an excellent indicator of the long-term success of mediation, but it remains difficult to measure, given the usually confidential nature of mediation (Innes, 1999). To deal with these measurement challenges, researchers generally use the level of confidence with regard to the agreement to predict whether the agreement will be respected (Wall & Lynn, 1993). As a result, confidence with regard to the agreement is considered a good estimate of parties' compliance with the agreement.

Reconciliation Between Parties

Parties' perception regarding reconciliation is the final dimension of our qualitative evaluation model. By improving communication and collaboration between parties, mediation can help diminish the negative and destructive effects of conflicts (Walton, Cutcher-Gershenfeld, & McKersie, 1994). Studies tend to show that, even if the parties do not reach an agreement, mediation can improve the communication and exchanges between them, which would re-establish the quality of their relationship (Jafee & Cameron, 1984). Although reconciling the parties is not the primary objective, this variable is considered to be important in that the reconciled parties will be more able to work together in the future.

Toward a Typology of Agreements

Because the quality of a mediation agreement is multidimensional, it implies that the evaluation of an agreement should simultaneously consider the five dimensions of our

model. Although there are probably as many possible combinations as there are agreements, it is possible to conceive that agreements can be grouped in broad categories. A cluster analysis will simplify the data by grouping the cases with homogenous characteristics and yield a classification for the quality of agreements reached. Furthermore, for each of the five dimensions of our quality model, the characteristics of the agreement cluster groups should be compared to those of the group of mediations that did not reach an agreement (i.e., reference groups). Such an analysis will identify what kinds of agreement have the highest quality, and which ones are worse, equal to, or better than not reaching an agreement.

Method

The methodology of the study is described in three parts. First, the data collection procedures are explained. Second, the measurement model is outlined. Finally, the statistical analyses used in the study are detailed.

Mediation Context

The study was conducted in partnership with the *Commission des normes du travail du Québec* (CNT). This organization's mission is to inform the public about matters surrounding the Labour Standards Act, supervise its application, and receive complaints from employees. One of the organization's roles is to achieve agreement between employers and employees with respect to disputes relating to the application of this Act and its regulations. The organization examines grievances dealing with dismissals without cause, forbidden work practices, and psychological harassment complaints. It is in this context that the CNT offers mediation services. The mediation program has been around for 15 years and has an agreement rate varying from 70% to 80%, which is within the range of what is normally seen in the field (Boulle & Kelly, 1998).

Data Collection

Participants are employees and employers involved in a workplace dispute mediated by a professional mediator from CNT. Participants were recruited by 17 CNT mediators in eight regions of Québec. Mediators were invited to play a part in the experiment on the basis of two criteria: (a) they had to have at least 2 years of experience as a mediator and (b) they had to have been mediating on a full-time basis for at least a year. Furthermore, they were not informed of the goal of the study during the entire data collection period.

The mediators' main role was to serve as intermediaries between the researchers and parties by making sure the questionnaires were distributed at the end of the mediation according to a predetermined protocol to ensure the scientific validity of the data collection process. Once mediation was completed, mediators were required to inform the parties of the study. In order to avoid bias in selection on the part of the mediators, mediators systematically offered the chance to participate to all parties involved in

a new mediation case. Parties that agreed to participate responded individually to the questionnaire on site, then sealed it into the prepaid envelope provided to preserve the anonymity of their responses. Because the CNT did not allow researchers to code the questionnaire to ensure the strict anonymity of the participants, it was not possible to pair parties or link questionnaires with mediators. The data were collected over approximately 2 months from October 16 to December 15, 2006.

Measurement Scales

The evaluation of the results of mediation was measured using the *Mediation Outcome Standard Evaluation Questionnaire* (MOSEQ). This questionnaire was developed in accordance with the five-dimensional model as part of a master's thesis (Le Tareau, 2006). The questionnaire has five scales: mediator's usefulness; procedural justice; satisfaction with agreement; confidence in agreement; and reconciliation between parties. In accordance with Bollen's (1989) rule, three statements measured each scale (i.e., dimension). For each statement, parties indicated the degree to which they agreed with the statement, using a Likert-type scale of six points from "Disagree strongly" (1) to "Agree strongly" (6). Statements were developed with a group of mediation practitioners to insure that questions would be easily understood by parties. MOSEQs scales and questions are reported in Table 2.

The psychometric characteristics of MOSEQ were tested in three steps. First, the results of an explanatory factor analysis show an optimal structure with questions loading significantly only on a single scale (see Table 3). Second, the results of a confirmatory factor analysis show a satisfactory construct validity ($p = .00947$; RMSEA = 0.049; GFI = 0.92; NFI = 0.97; CFI = 0.99; AGFI = 0.89). Finally, the degree of homogeneity

Table 2
Mediation Outcome Standard Evaluation Questionnaire (MOSEQ)

Measurement scales	Scale statements
Mediator's usefulness	MU1 The mediator's intervention was determinant in advancing discussion.
Cronbach's alpha = 0.872	MU2 The mediator had an important impact on the progress of discussions.
	MU3 The mediator's contribution was critical to advancing discussion.
Procedural justice	PJ1 The mediation meeting was run without bias.
Cronbach's alpha = 0.848	PJ2 Mediation was run in a neutral and objective manner.
	PJ3 Mediation took place in an impartial climate.
Satisfaction with the agreement	SA1 I am happy with the solution we came to.
	SA2 The settlement of the conflict was satisfactory to me.
Cronbach's alpha = 0.947	SA3 I am content with the agreement we reached.
Confidence in agreement	CA1 I believe our agreement will be applied.
Cronbach's alpha = 0.951	CA2 I am convinced the agreement reached will be respected.
	CA3 I believe we will abide by the provisions of the agreement.
Reconciliation between parties	RP1 I am reconciled with the other party.
Cronbach's alpha = 0.929	RP2 I feel like my relationship with the other party has been restored.
	RP3 I believe I have rebuilt my relationship with the other.

Table 3
Exploratory Factor Analysis of MOSEQ

	Dimension scales Satisfaction with agreement	Reconciliation between parties	Confidence in agreement	Mediator's usefulness	Procedural justice
SA2	0.634				
SA1	0.626				
SA3	0.613				
RP3		−0.976			
RP1		−0.958			
RP2		−0.856			
CA2			−0.927		
CA1			−0.902		
CA3			−0.901		
MU1				0.973	
MU3				0.762	
MU2				0.727	
PJ2					0.943
PJ1					0.848
PJ3					0.792

Notes. MOSEQ, Mediation Outcome Standard Evaluation Questionnaire.
Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization since factors are correlated.
Factor loadings below 0.30 are left out of the table since they are not significant.

of the scales was tested using the calculation of Cronbach's alpha internal consistency coefficient. Results show satisfactory internal consistency for all scales: mediator's usefulness $\alpha = 0.872$; procedural justice $\alpha = 0.848$; satisfaction with agreement $\alpha = 0.947$; confidence in agreement $\alpha = 0.951$; and reconciliation between parties $\alpha = 0.929$. Consequently, we consider MOSEQ to be a valid measure of five qualitative mediation dimensions. Table 4 highlights intercorrelations of the five scales and the agreement rate.

Finally, parties had to indicate the mediation outcome in the questionnaire. Two answers were possible: agreement reached or mediation ended without agreement. Consequently, we had a group of mediations that produced agreements and another that did not produce any agreement.

Cluster Analysis and ANOVA

The five qualitative outcome scales were used to conduct a cluster analysis on the group of mediations that resulted in agreement. Ward's method and squared Euclidean distance were used to cluster the cases, which is the recommended cluster analysis strategy (Hair, Anderson, Tatham, & Black, 1998). Furthermore, the data were standardized by variable in order to minimize variance between the dimensions. The result is the

Table 4
Descriptive Statistics and Correlations

	M	SD	1	2	3	4	5	6
1. Mediation outcome	0.74	–	–					
2. Mediator's usefulness	4.90	1.20	.294**	(.872)				
4. Procedural justice	5.10	1.10	.231**	.794**	(.848)			
5. Satisfaction with agreement	4.29	1.49	.407**	.646**	.630**	(.947)		
6. Confidence in agreement	4.94	1.33	.541**	.640**	.591**	.745**	(.951)	
7. Reconciliation between parties	3.56	1.38	.324**	.482**	.421**	.701**	.534**	(.929)

Notes. **Correlation is significant at the .01 level (two-tailed).
Cronbach's alphas are presented in the diagonal.

identification of categories of agreement. To make the comparison even more informative, we included the mediations that did not reach an agreement as our comparison group. In order to verify the existence of significant differences between clusters, a one-dimensional analysis of variance (ANOVA) was conducted. This made it possible for us to determine how groups are differentiated from each other.

Results

The results are presented in three parts. First, the sample of the study is described. Second, the descriptive statistics of mediation outcome are reported. Finally, the clusters of mediation outcomes are presented and their distinctions are highlighted.

Sample

The response rate was 42.5%, which is acceptable for exploratory type research (Saks, Schmitt, & Kilmoski, 2000). A total of 207 valid questionnaires were kept for statistical analysis. The sample is composed of employers (51.2%) and employees (48.8%). In terms of gender, 52% of the respondents were female and 48% were men. Nearly 52.7% have a high school education, 35.5% have an undergraduate university diploma, and 11.8% have a graduate level university education. The parties are 43 years old on average, with 7 years of seniority in their organization. Most parties work full-time (73%). The large majority of respondents work in the private sector (73.4%), while the rest work in the public sector. The average salary of respondents is $44,052.

Descriptive Statistics

Of the 207 questionnaires, 26% of the mediation cases did not result in an agreement ("no agreement" group), while 74% of the mediations resulted in an agreement between the parties ("agreement" group). Table 5 reports the general mean for each dimension of the quality of mediation outcome. Values were calculated using the average of results of statements associated with dimensions, after validation of the measurement instrument.

Table 5

Averages for Each Dimension by Agreement Type

Dimension	General average	Agreement types			
		No agreement	Disappointing agreement	Satisfactory agreement	Value-added agreement
Mediator's usefulness	4.90 (1.20)	4.30 (1.34)	3.26 (1.21)	5.29 (0.61)	5.65 (0.53)
Procedural justice	5.10 (1.10)	4.67 (1.26)	3.54 (1.20)	5.40 (0.56)	5.77 (0.34)
Satisfaction with agreement	4.29 (1.49)	3.22 (1.58)	2.69 (1.00)	4.35 (0.86)	5.72 (0.38)
Confidence in agreement	4.94 (1.33)	3.62 (1.43)	4.31 (1.47)	5.18 (0.90)	5.91 (0.24)
Reconciliation between parties	3.56 (1.38)	2.80 (1.22)	2.84 (1.03)	3.22 (1.16)	4.91 (0.80)

Note. SD are shown in parentheses.

In general, we note that respondents consider the mediator's intervention as having been helpful in advancing negotiations (average of 4.90 of 6) and perceived the mediation process as very fair (average of 5.10 of 6). The parties usually seem satisfied with the agreement reached (an average of 4.29 of 6) and they have relative confidence in it (average of 4.94 of 6). Lastly, in general, respondents believe they are not very much reconciled with the other party (average of 3.56 of 6). In this regard, reconciliation seems to be an occasional outcome of the mediation process.

Cluster Analysis Results

In light of the results of the cluster analysis done on the cases that reached an agreement, three clusters emerged. These agreement types are compared with a reference group composed of cases that did not reach an agreement. Table 5 reports the mean of each quality outcome dimension for the three clusters of agreement as well as for the no agreement group. The average for all cases on each dimension is also reported. Figure 2 illustrates the differences between agreement types using the no agreement group as a reference point.

In order to verify whether there were significant distinctions between the four groups, we performed a one-dimensional variance analysis for each dimension of the results. We note that the ANOVA results are significant at the level of $p < .01$ for all dimensions. In other words, the four groups generally present statistically significant differences in averages for each dimension of the mediation results. To verify the differences in intergroup averages, we performed the Dunnett t test with the no agreement group as a comparison group. Table 6 highlights how the three types of agreement significantly stand out from the no agreement group. Significant differences were used to characterize the type of agreements.

No Agreement Group

With 55 cases, the first group—no agreement—makes up 26% of the sample. Generally, respondents from this group obtained below average results for their appreciation of mediator's usefulness ($u = 4.30$) and their perception of process fairness ($u = 4.67$).
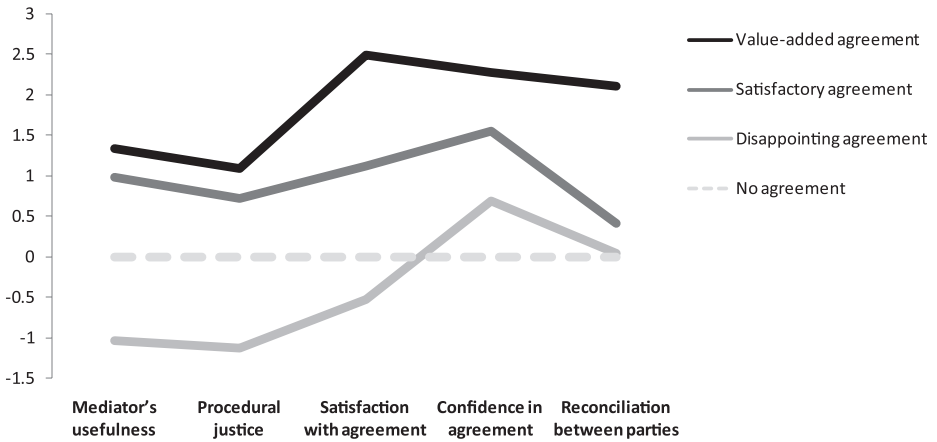
Figure 2. Differences of mean between agreement types and the no agreement group for each quality outcome dimension.

Table 6
Multiple Comparison Between Groups

Dependent variable	(I) Agreement types	(J) Agreement types	Mean difference (I − J)
Mediator's usefulness	Disappointing agreement	No agreement	−1.03630*
	Satisfactory agreement	No agreement	0.98942*
	Value-added agreement	No agreement	1.34886*
Procedural justice	Disappointing agreement	No agreement	−1.13130*
	Satisfactory agreement	No agreement	0.72513*
	Value-added agreement	No agreement	1.10290*
Satisfaction with agreement	Disappointing agreement	No agreement	−0.53000
	Satisfactory agreement	No agreement	1.13095*
	Value-added agreement	No agreement	2.50511*
Confidence in agreement	Disappointing agreement	No agreement	0.68862*
	Satisfactory agreement	No agreement	1.55719*
	Value-added agreement	No agreement	2.28991*
Reconciliation between parties	Disappointing agreement	No agreement	0.03907
	Satisfactory agreement	No agreement	0.41693
	Value-added agreement	No agreement	2.10633*

Notes. Dunnett t test (two sided) treats the ''No agreement'' group as a control, and compares all other groups against it.
*The mean difference is significant at the 0.05 level.

The average score for satisfaction with the agreement ($u = 3.22$), confidence in agreement ($u = 3.62$), and reconciliation ($u = 2.8$) is well below average. This group serves as a comparison group for the three types of agreement. The objective is to evaluate whether parties that reach agreements fared better on the qualitative aspect of mediation outcome than parties that did not reach an agreement.

Disappointing Agreement Group

The second group—disappointing agreement—is made up of 25 cases and represents 12% of the sample. This is the only type of agreement where parties are significantly less satisfied with mediator usefulness ($u = 3.26$) and procedural justice ($u = 3.54$) than the no agreement group. Furthermore, parties in this group are statistically as satisfied with the agreement ($u = 2.69$) as parties that did not reach agreement. They are confident in the agreement ($u = 4.31$), but do not feel at all that they have reconciled with the other party ($u = 2.84$). Because dissatisfaction is the hallmark of this group, we labeled this type of agreement ''disappointing agreement.''

Satisfactory Agreement Group

The third group—satisfactory agreement—makes up 33% of the sample and comprises 70 cases. Parties in this group are more satisfied with the mediator ($u = 5.29$) and the process ($u = 5.4$) than the no agreement group. They are significantly more satisfied with the agreement ($u = 4.35$) and confident in the agreement ($u = 5.18$) than the no agreement group. Because parties in this group are satisfied with the mediator, the process, and the agreement, we have labeled this type of agreement ''satisfactory agreement.'' However, it is important to note that parties in this group did not feel that they have reconciled with the other party ($u = 3.22$) since their level of reconciliation is not statistically different from the level of parties that did not reach an agreement.

Value-Added Agreement Group

The fourth group—value-added agreement—contains 62 cases and represents 29% of the sample. Parties belonging to this group have a higher score on all five mediation quality dimensions: mediator's usefulness ($u = 5.65$); procedural justice ($u = 5.77$); satisfaction with agreement ($u = 5.72$); confidence in agreement ($u = 5.91$); and reconciliation between parties ($u = 4.91$). Furthermore, it is the only group that has a significantly higher than average level of reconciliation between parties than the no agreement group. Because parties are both satisfied with the agreement and have reached a high level of reconciliation, we labeled this type of agreement ''value-added agreement'' to distinguish it from the preceding group. The added value is the reconciliation with the other party.

The results of our analysis show that these three types of agreement differ significantly from the no agreement group. Table 7 summarizes the profiles of the three types of agreement, in addition to the no agreement group. The table highlights the significant distinctions between groups. A comparison of the sociodemographic data demonstrates that there is no difference in profile between the four groups.

Discussion

The cluster analysis made it possible to highlight three categories of agreements, which were in turn compared to a group of mediations that did not reach an agreement. In addition to qualifying the quality of mediation agreements, the comparison highlights three important findings.

Table 7
Synthesis of Agreement Types

	No agreement	Disappointing agreement	Satisfactory agreement	Value-added agreement
Mediator's usefulness	–	–	+	+
Procedural justice	–	–	+	+
Satisfaction with agreement	–	–	+	+
Confidence in agreement	–	+	+	+
Reconciliation	–	–	–	+

First, having confidence in a proposed agreement seems to be necessary to conclude mediations with an accord. All the agreement types have a significantly higher level of confidence in the proposed agreement than the no agreement group. Therefore, the first criterion for reaching a settlement seems to be a minimum level of confidence that the proposed agreement will be respected. Although this result is not surprising, it pinpoints the importance of trusting the other party's words. In the context of reaching a voluntary agreement, severe mistrust between parties can be a major barrier to reaching an agreement.

Second, being satisfied with the proposed agreement is not necessary to concluding a mediation with an accord. More specifically, the disappointing type of agreement does not produce more satisfaction with the outcome than the no agreement group. This finding poses an intriguing question. Why would someone sign a disappointing agreement?

One hypothesis is that a party might sign an agreement out of spite, to buy peace, or just to get the conflict over with. Another explanation could be unequal bargaining power between the two parties: the disadvantaged party could have resigned himself and made do with less. Lastly, it is interesting to note that ''disappointing agreement'' parties are also unsatisfied with the process and the mediator's role. These facts suggest it is possible that some agreements, although signed and thus intended to be applied, could have been forced.

Third, reconciliation between parties is not a standard result of mediation. Only the value-added agreement type resulted in reconciliation between parties. In other words, only 29% of cases resulted in a somewhat repaired relationship. In most cases, agreements were reached but there was little reconciliation between parties. This finding poses an intriguing question. Why isn't there reconciliation between parties more often?

One hypothesis is that the potential for reconciliation depends on the type of conflict. In our sample, some disputes were about employment termination and the negotiation of monetary compensation. In such cases, the parties may likely not have cared about reconciliation. Another hypothesis is that some mediators might have used a mediation model that is not conducive to reconciliation. For example, problem-solving mediation and evaluative mediation do not put as much emphasis on relationship as transformative mediation. Finally, mediators might have simply lacked the skills to untangle complex relational conflicts, and were thus unable to reconcile parties even though they help them reach an agreement.

Theoretical and Practical Implications

This study yields interesting theoretical and applied benefits. First, our measurement scales enable a multidimensional measurement of the mediation agreements. By moving beyond the traditional ''agreement/no agreement'' standard, it contributes to broadening the notion of ''success.'' Furthermore, the MOSEQ questionnaire makes it possible to conduct in-depth investigations of the potential impact of mediation strategies on each dimension.

The practical implications of our study also deserve to be highlighted. By showing that it is possible to cluster mediation agreements in three categories, mediation programs can be evaluated not only in terms of the agreement rate, but also in terms of the type of agreements concluded. In this regard, the MOSEQ questionnaire provides a promising framework for assessing the quality of mediation programs.

This is important because mediation's success rate (according to the signed agreement criteria) is generally very high in the literature on mediation programs (Lipsky, Seeber, & Fincher, 2003). As a result, there is often little room for improving the settlement rate because most programs will reach a high settlement rate and plateau at that level. However, evaluating success by agreement type could help program managers set compelling goals to improve mediation outcomes. For example, a training program could focus on improving the proportion of value-added agreements, or decreasing disappointing agreements instead of only seeking to improve the settlement rate.

Strengths, Limits, and Avenues for Future Research

Our study proposes an instrument for measuring the outcome of mediation that could prove useful to both researchers and mediation program managers. The instrument is based on a literature review and presents sound psychometric qualities. The questionnaire's structure was validated using a confirmatory factor analysis. Furthermore, the MOSEQ questionnaire is fairly short (15 statements) and is suitable to program evaluation.

In terms of the limits of the study, the sample size is somewhat small for a cluster analysis. We can nonetheless maintain that empirical research on workplace mediation rarely uses a large sample, as access to real data is often restricted. Because the questionnaire was developed to evaluation workplace mediation, its application might be limited to this kind of conflict. However, the five dimensions of the questionnaire are drawn from numerous researches on mediation outcome, and we feel that the model is applicable to various mediation contexts. Nevertheless, future research could test MOSEQ on conflict mediation in other settings, such as family mediation.

Conclusion

This study proposed a five-scale evaluation questionnaire (MOSEQ) to assess the quality of mediation agreements. More specifically, the scales measure parties' appreciation of mediators' usefulness; their perception of procedural justice; their level of satisfaction with the agreement; their level of confidence that the agreement will be implemented; and the degree of reconciliation between parties. The psychometric qualities of the

questionnaire were measured and judged satisfactory. By using the questionnaire to conduct a cluster analysis of a sample of agreements from a governmental mediation program, it was possible to characterize three types of agreements: disappointing agreement, satisfactory agreement, and value-added agreement.

The empirical categorization of agreements into three types using cluster analysis is a significant theoretical contribution. It also raises important questions. First, the results show that some agreements are less satisfactory to parties than not reaching agreement. Have the parties been forced into an agreement? Have they resigned themselves to settling for much less than expected? Second, while most agreements are satisfactory, only a small proportion of agreements involved reconciliation between parties. Are some types of conflict not appropriate for reconciliation? Are reconciliation strategies underused by some agreements? Clearly, not all agreements are equal. Quantifying the quality of mediation agreements is important.

The categorization of agreements also offers a practical way to move the assessment of mediation programs' success beyond the simple agreement rate. With the questionnaire used in this research, it is possible to draw up a profile of agreement types within a mediation program. Such a profile is a precious tool for understanding what kind of agreement a program is generating. In fact, without a questionnaire to quantify the quality of agreements, settlement rates mean little. Having a high settlement rate is a good thing, but only if the proportion of disappointing agreements is low.

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