Complementarities in Employment Dispute Resolution Systems:

Bigger Bang or Just Bigger Bucks?

by

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ABSTRACT  

Organizations face increasing pressure to improve internal conflict management, which has led to experimentation with different types of dispute resolution components. These include: Rights-based processes, in which third-parties determine the outcome of a dispute based on laws, contracts or standards of behavior; Interest-based neutrals, who manage the dispute resolution process and leave decision-making authority to the parties themselves; and Negotiations, which include all efforts by individual disputants to resolve conflicts themselves. Anecdotal evidence suggests that systems combining all three types of dispute resolution components are more effective than any of the individual or pairs of components. To date, however, there is no theoretical explanation or rigorous empirical evidence to justify the regular implementation of full dispute resolution systems by organizational leaders.  

In this dissertation I present and test two competing theoretical models to explain the benefits of dispute resolution systems over pairs and individual components. The first is an additive model, in which the more types of components that are available, the more types of disputes that can be managed. The second model is a complementarities model, in which none of the components can operate effectively without reinforcement from the other types of components. Thus, performance benefits accrue only when a full system is implemented.  

I test these competing models in a multi-method quasi-experimental and two supplemental before-and-after field studies. I consistently find evidence contradicting the additive model, and suggestive evidence supporting the complementarities model. The effects of exposing employees to a three-component dispute resolution system are: 1) more positive attitudes towards workplace conflict, 2) less conflict avoidance, 3) more conflict negotiation, and 4) more conflict resolution. When employees are exposed to a two-component system, however, only negotiation behaviors increase. All other outcomes were either non-significant or in the opposite-to-expected direction. Although this study is not conclusive evidence of the complementarities model, the data clearly reject the additive one. This study implies that practitioners should focus on introducing full systems to organizations instead of taking an incremental approach to changing dispute resolution behaviors.  

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To my mother, Margaret, whose strength inspires me.
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CHAPTER 1: INTRODUCTION

Workplace conflict is becoming increasingly visible in North American organizations. As organizations experiment with flatter, more decentralized structures, workers are becoming more interdependent and responsible for more decision-making (Dumaine 1991; Nohria 1991). These changes mean new types of conflicts may arise among different groups of workers than were experienced in bureaucratically structured organizations (Janssen, Van de Vliert & Veenstra 1999). The workforce is also becoming increasingly diverse. More women, minorities, foreign nationals, and people with different educational and experiential backgrounds are entering the workforce. This diversity inevitably leads to different kinds of conflicts than were experienced by a more homogenous workforce (Fiol 1994; Williams & O’Riley 1998). Concomitant with changes in organizational structures and demographics, legal protections against discrimination, harassment, and poor working conditions have increased. This has increased the legal costs to organizations when conflicts are filed in external agencies and courts.

Research has shown that the effects of these conflicts on organizational performance depend, to a large extent, on how they are managed (De Dreu & Weingart in press; Jehn, Northcraft & Neale 1999; Pelled, Eisenhardt & Xin 1999). Pro-actively managed conflict allows organizations to benefit from diversity and improves productivity, decision-making, creativity and innovation (Amanson, 1996; Schweiger, Sandberg & Reichner 1989; Tetlock, Armor & Peterson 1994). When conflicts are avoided, however, other research demonstrates that it creates complacency about problems and decisions (Janis 1985; Morrison & Milliken 2000) and creates an illusion of understanding the reasoning and thinking underlying others’ arguments (Tjosvold, Nibler & Wan 2001). Studies suggest that organizations have been more inclined to encourage constructive, proactive management of conflicts in recent years given these changed business conditions (Weingart & Jehn 2000; de Dreu & Van de Vliert 1997; Thompson 2000).
The proportion of the workforce covered by collectively bargained employment contracts has fallen considerably in the past fifty years, leaving individual workers with little formal recourse but to file claims in public enforcement agencies when they are mistreated. As both the costs of defending employment law suits and the case backlog in public agencies grows, governmental institutions, such as the Federal Sentencing Guidelines, public policy institutions, such as the Commission on the Future of Worker Management Relations and professional associations, such as the Society of Professionals in Dispute Resolution (SPIDR) have been encouraging organizations to improve their internal dispute resolution capabilities (Commission on the Future of Worker Management Relations 1994; Kochan, Lautsch & Bendersky 2000; McDermott, et al. 2000; SPIDR 1998 & 2001). Thus in recent decades, there have been both internal and external pressures on organizations to experiment with dispute resolution procedures.

Organizational stakeholders, namely employees, employers, and unions have different interests in resolving disputes. The specific design of dispute resolution procedures is the result of a negotiated process among these groups (Walton, Cutcher-Gershenfeld & McKersie 1994; Walton & McKersie 1965). An over-simplified characterization is that employers want internal dispute resolution procedures to reduce legal expenses, maintain control, and improve employment relations (Ewing 1989; Lipsky & Seeber 1998; Rowe 1997), employees want dispute resolution procedures to improve the fairness of conflict processes and outcomes (Lind, et al. 1993; Lind, et al. 2000), and unions want dispute resolution procedures to generate more consistency in conflict outcomes (Slichter, Livemash & Healy 1960). Traditionally, these different interests have led stakeholders to embrace different types of dispute resolution procedures. Employers tend to prefer negotiations, particularly interest-based negotiation in
order to empower employees to resolve many interpersonal and task-related conflicts themselves or with supervisor intervention. Employees tend to embrace interest-based neutrals, such as mediators and ombudsmen, because they assist in the dispute resolution process, while leaving the decision-making power up to the individual employees. Unions tend to focus on formal, rights-based procedures that are designed to hold managers accountable to collectively negotiated employment contracts. Obviously in practice there is great variation in preferences within each stakeholder group.

Best practices now suggest that the way to meet all the interests of all these stakeholders is to integrate these three types of dispute resolution components together in a coherent dispute resolution system, or DRS (McCabe 1988; Westin & Feliu 1988; Ury, Brett & Goldberg 1989; Costantino & Merchant 1996; Rowe 1997; Slaikeu & Hasson 1998). It is argued that organizational DRSs achieve the goal of effectively managing workplace conflict internally by allowing disputants to choose the most appropriate access point for addressing a given dispute, and improving their experience with both the processes and outcomes of managing workplace conflict.

At this stage in the field's development, evaluation of DRSs has relied on anecdotal and descriptive evidence based on a few leading cases (Lewicki, Weiss & Lewin 1992; Bingham & Chachere 1999). There has been little work developing or empirically testing the theoretical mechanisms to explain why DRSs are more effective than their individual component parts, which traditionally have been implemented independently (Sheppard 1992). Without clear evidence of their benefits, many organizations cannot justify the additional up-front investment required for implementing a DRS compared to individual components.
This dissertation is an effort to advance both theory and empirical evidence of DRS effectiveness. I utilize economic and human resources management theories to propose specific mechanisms, and several field studies to test them. The results have clear implications for both research on dispute resolution and organizational change interventions generally, and practical significance for managers who are considering their implementations.

Prevalence and Evaluation of DRSs

Empirical work on organizational dispute resolution has been in three primary categories: 1) large-scale surveys of usage rates of different DRS options by organizations, 2) comparison of the relative preferences for mediation, arbitration and adjudicatory procedures, and 3) case study descriptions of organizations that implemented DRSs. Several large, national surveys have been conducted on employment DRS usage rates in the U.S. in the 1990s (GAO 1995 & 1997; Colvin 1999; Lipsky & Seeber 1998). The consensus is that about half of large non-union private employers have used some kind of formal dispute resolution procedure, although a much smaller percentage (closer to 15%) use mediation or arbitration "frequently" (Lipsky & Seeber 1998). Although in only 3% of unionized firms in the U.S. has mediation been written into contractual grievance procedures, 80-98% of filed grievances are settled through informal procedures prior to formal arbitration (Feuille 1999). This suggests that interest-based negotiation and informal mediation are common experiences in the unionized sector, although formal grievance mediation is merely on the fringes of grievance activity. Very few organizations have implemented internal DRSs comprised of all three component parts. In sum, despite significant exposure to alternative dispute resolution processes in the U.S., full-scale DRSs are relatively rare.
Several recent studies have analyzed the effectiveness of different alternative dispute resolution options in public sector employment law enforcement agencies and courts. The main strength of this line of research is the inclusion of control groups of cases that did not use the alternative dispute resolution options (see McDermott et al. 2000; Kochan, Lautsch, & Bendersky 2000; and Kakalik, et al. 1996 for some examples). The studies report higher settlement rates, and significant time and cost savings through mediation compared to adjudicatory procedures. In particular, the Equal Employment Opportunity Commission (EEOC) mediation program evaluation found significant time and cost savings for participants along with high levels of satisfaction. Furthermore, the mediation program cut the EEOC’s case backlog in half over a two-year period (McDermott et al. 2000). Kochan, Lautsch and Bendersky’s (2000) evaluation of a state EEO enforcement agency and Brett, Barsness and Goldberg’s (1996) evaluation of court-annexed neutral service providers had similar findings, although with less of an impact on reducing case backlogs. Lisa Bingham and her colleagues have produced numerous evaluations of the U.S. Postal Service’s mediation alternative to EEOC adjudicatory procedures (Bingham 1997; Bingham, et al. 2000; Bingham & Novac 2000). They consistently find evidence that the mediation program is preferable to the adjudicatory procedures to both employee complainants and managerial respondent, and that fewer complaints are filed externally as a result. Thus, the weight of the evidence supports the benefit of mediating some employment claims versus adjudicatory procedures.

Other authors who have examined the justice aspects of workplace conflict management options emphasize the importance of formal, rights-based options with structural protections from bias and retaliation. Ewing’s evaluation of non-union complaint procedures determined, "the formal channel...adds strength, credibility and trust to the informal channels" (Ewing 1989):
6). Likewise, Blancerco & Dyer (1996) found that perceptions of fairness were strongly correlated with the DRSs due process characteristics. In fact, they found that employees' perception of the fairness of rights-based processes was more related to procedural characteristics than to outcomes. Feuille and Delany (1992) find that there is greater variation in options in non-union versus union grievance procedures, but that the non-union options tend to include fewer due process protections and are used less than union grievance procedures. Some legal and professional organizations have adopted guidelines to ensure procedural safeguards for the implementation of employment arbitration and mediation options in response to concerns that an interest-based option may fail to protect the rights of complainants (SPIDR 1998). Thus, providing justice is an important component of an employment DRS. Traditionally, it has been provided through rights-based procedures.

Reviews of grievance and complaint-handling procedures (i.e., both union and non-union rights-based processes) also reveal a potential dark side to workplace conflict management processes. In his review of the literature, Lewin (1999) concludes that formal, unionized grievance procedures constitute impressive protection of employee rights and justice in organizations. In a series of studies in a variety of contexts, however, he also finds strong evidence that involvement in both union and non-union grievance and complaint-handling procedures results in deteriorated employment relationships for employees and their supervisors due to significant post-settlement retaliation (Lewin 1990 & 1999; Lewin & Peterson 1999). This raises legitimate concerns about the ability of rights-based procedures alone to provide effective internal recourse for employees.

Most of the research that has been conducted on organizational dispute resolution has, thus, focused on one component or compared one process to another. Studies on full-scale DRSs
are relatively rare, and have utilized in-depth case study designs that examine the minutiae of DRS design, implementation and use. The stories of International Harvester (Ury, Brett & Goldberg 1989), MIT (Rowe 1988), Brown and Root (Slaikeu & Hasson 1998; Zinsser 1996), TRW (Colvin 1999), the Royal Canadian Mounted Police (Lynch 1997), and Saturn (Rubinstein & Kochan 2001) loom large in the literature as leading cases. While these case studies offer optimistic assessments of the positive effects of implementing DRSs on a range of outcomes—from cutting legal expenses, to reducing EEOC case filings, to improving employee morale, to contributing to the development of a participatory organizational culture—they remain anecdotal case studies. They are more descriptive than predictive, do not explicate the mechanisms through which DRSs work, and without more rigorous empirical methods many critics doubt that their successes can generalize more broadly (Delikat & Kathawala 1996; Stone 1996; Bingham & Chachere 1999).

SUMMARY OF THE DISSERTATION

The literature on employment dispute resolution has deep roots and is constantly growing. The rigor that was applied to early studies of individual components has not yet been applied to combinations of components in DRSs. In this respect, academia has fallen behind practice. DRS practitioners, too, would benefit from rigorous academic analyses of these programs to generate “best practice” prescriptions based on empirical, rather than anecdotal data.

In this dissertation, I use an operational definition of DRSs as the combination of the three types of components—rights-based procedures, interest-based neutrals, and negotiation—in an internally coherent, mutually reinforcing bundle. Effectiveness is defined as the extent to which individual organizational members perceive workplace conflict positively, actively utilize conflict resolution options, and frequently resolve conflicts to their satisfaction. This is therefore
a cross-level model, in which I study the effects of an organizational design on individuals’ attitudes and behaviors (Rousseau 1985; Fiol, O’Connor, & Aguinis 2001).

In chapter two, I present two competing theoretical explanations for the benefits of DRSs over individual and pairs of components. The additive model is a linear relationship between the number of dispute resolution components and effectiveness due to the broader menu of options available to address more types of workplace disputes. The complementarities model instead suggests a curvilinear relationship between the number of components and effectiveness due to reinforcing synergies among the components. This complementarities model suggests that not only would the effects of implementing a DRS be greater than the effects of implementing a single or pair of components, but also that the effects of implementing fewer than three components together may be insignificant or even deleterious (Milgrom & Roberts 1990). Thus, the main research question of this dissertation is: Do three-component DRS’s resolve workplace conflicts more effectively than pairs or individual components because more components can address more types of conflicts or because the interplay among all three components generates positive synergies that makes the total more effective than the sum of its parts? I present eight hypotheses designed to adjudicate between these two explanatory models.

In chapter three, I present the research design and the field setting in which the main research is conducted. In chapter four, I present the methods, analyses and results of a quasi-experimental field study designed to adjudicate between the linear and curvilinear models from the theoretical section. In it, I compare the conflict attitudes and behaviors of individuals in an office who were exposed to a DRS for eighteen months to a matched office in the same organization that only had a traditional grievance procedure. I also compare the effects of an interest-based negotiation training intervention relative to a baseline grievance procedure in two
other matched offices in the same organization. I find that the outcomes of the DRS are all significant in the predicted direction, while only one outcome of the training intervention is in the predicted direction. All the other outcomes are significantly in the wrong direction, thus supporting the curvilinear model.

In the fifth chapter, I present two supplementary longitudinal studies of sites that had also implemented negotiation-training interventions. Comparing data collected before and after the training indicate neither intervention had any significant effects on individuals’ conflict attitudes and behaviors. These supplemental studies suggest the curvilinear relationship may be replicable in other settings with other kinds of interventions. I conclude the dissertation by identifying both the contributions and the limitations of this dissertation, and discussing the implications of the findings for research, practice and policy.
CHAPTER TWO: THEORETICAL MODEL

In this chapter, I present my primary research question and hypotheses. I develop two models to explain what it is about the interplay of components (i.e. examples of rights-based processes, interest-based neutrals, and negotiations) in dispute resolution systems (DRSs) that make the combination of all three types more effective than individual components or pairs of components. My hypotheses are designed to adjudicate between the two models. First, it is possible that DRSs are more effective because each type of component is designed to address different types of disputes. The first model is a simple linear, or additive relationship between the number of types of components available in an organization and the effective resolution of conflicts in the workplace. This implies that organizations can implement dispute resolution systems incrementally, choosing the specific components based on a cost-benefit analyses of the organization's specific needs. An alternative explanation is that the relationship between the number of types of components and effectiveness is actually curvilinear. The economic complementarities theory (Milgrom & Roberts 1990) suggests that the benefit of a DRS over individual components and pairs is in their interplay and mutual reinforcement. In other words, each type of component is unable to effectively manage those types of conflicts for which it is best designed without reinforcement from the others. This second, complementarities model, implies that organizations need to take a radical approach to changing conflict behaviors among their workforces by implementing a full system simultaneously. An incremental or sequential implementation of components could have sub-optimal effects, or even unforeseen negative consequences. Thus in my dissertation I seek to answer the research question: Do three-component DRS's resolve workplace conflicts more effectively than pairs or individual components because more components can address more types of conflicts or because the
interplay among all three components generates positive synergies that makes the total more effective than the sum of its parts?

THREE CATEGORIES OF COMPONENTS AND DRSs

I define DRSs as the combination of three types of dispute resolution components: Rights-based procedures, interest-based neutrals, and negotiations (see Table 1).

Rights-Based Processes

All rights-based components involve third-parties determining the outcome of a dispute based on laws, contracts or standards of behavior (Ury, Brett & Goldberg 1988:7). Examples of rights-based components in organizations are arbitration, formal complaint investigation, and peer review panels. The most common manifestations of rights-based components are the later stages of grievance procedures in unionized settings (Dunlop & Zack 1997; Lewin 1999), and similarly structured complaint-handling procedures found in many non-union settings (Ewing 1989; McCabe 1988). They arose in unionized settings to provide a means of resolving contract interpretation disputes without resorting to strikes or lawsuits (Chamberlain & Kuhn 1965). The union step model has been replicated in some non-unionized complaint-handling procedures as a way to minimize lawsuits and possibly to avoid unionization, although they do not typically involve employee representatives, and managers rather than neutral arbitrators may make final decisions (Colvin 1999; Ewing 1989; Feuille & Delaney 1992; McCabe 1988; Rowe 1997; Westin & Feliu 1988). Rights-based procedures are effective because they create a structure in which dispute resolution is systematized to improve fact-finding and reduce biases inherent in a system with power imbalances among the interest groups. Their enforcement powers deter
subsequent violations by holding managers accountable for professional and impartial treatment of their employees (Slichter, Livernash & Healy 1960).

Studies of right-based procedures have often been conceptualized within the exit-voice-loyalty theory presented by Hirschman in 1970. While they offer mixed evidence of how rights-based procedures affect productivity, these studies have demonstrated that right-based procedures clearly reduce turnover and its associated recruitment and training costs (Bemmels & Foley 1996; Colvin 1999; Feuille & Delaney 1992; Freeman & Medoff 1984; Spencer 1986). The basic model is that employee loyalty is affected by the opportunity to voice concerns with their work situation. Without voice mechanisms, employees in intolerable work environments ultimately exercise their dissatisfaction by leaving the company. While this theory has been criticized for being too simplistic, the basic relationship between voice mechanisms and employee turnover is quite robust (Dowding, et. al 2000).

The limitation of right-based procedures is that they are designed only for disputes concerning violations or interpretations of an employment contract. Since these procedures are usually available to all employees who perceive themselves as having been treated unfairly, some other types of conflicts experienced at work--such as interpersonal issues or task processes that are not covered under an employment contract--are erroneously filed in rights-based procedures. This can have negative consequences for both the disputants and the organization. Once a formal complaint is filed in a right-based procedure, a long and costly bureaucratic process is usually necessary to determine whether or not the claim is substantively appropriate and legitimate. In other words, the case screening process is highly inefficient. Disputants who are then told that their issue cannot be considered by the adjudicators find the process to be insufficiently transparent, disempowering, dissatisfying, and unfair (Folger 1986). Even those
employees whose claims are considered in right-based procedures may face negative retaliation afterwards, which calls into question the ability of rights-based processes alone to provide security for employees with conflicts (Lewin 1990; Lewin & Peterson 1999). Some employees simply dislike or are uncomfortable with rights-based procedures in any circumstances, and if an organization relies exclusively on them, employees with legitimate workplace conflicts may be left without any voice mechanisms.

Interest-Based Neutrals

Interest-based neutrals are also third-parties who intervene in disputes, but to help the parties reach agreements that meet their mutual interests rather than to determine if one parties' rights have been violated by the other (Ury, Brett & Goldberg 1988:6). Furthermore, while rights-based procedures involve third-parties controlling the outcomes of disputes, interest-based neutrals manage the dispute resolution process, but the disputants retain control over the outcomes (Riskin 1996; Sheppard 1984; Wall & Lynn 1993). Examples of interest-based neutral components in organizations are mediation, ombudsmen, facilitators and coaches. These components may be designed as alternatives or precursors to rights-based processes, such as early stages of grievance procedures and equal employment opportunity cases, or as general workplace conflict management resources.

Generally, interest-based neutrals try to maintain the protections of rights-based processes while focusing on helping the disputants meet their interests in mutually agreeable terms. Mediation is the most commonly implemented interest-based neutral component in organizations. Communication that would not have flowed between two disputants can flow from each disputant to the mediator. Thus, information that may not otherwise have been shared
is used to fashion agreements that meet the underlying interests of both parties. Formal mediation in organizations tends to be available only for certain kinds of disputes; particularly those that might get filed externally in public agencies and courts. It tries to protect disputants from negative repercussions by maintaining procedural safeguards, which ensure confidentiality and volition in the process (Blancero & Dyer 1996; Ewing 1989; Lewin 1999). The strength of interest-based neutrals is that they are more versatile than rights-based procedures. With interpersonal elements, even in a dispute over legal issues, the processes used by interest-based neutrals are considered more satisfying, empowering, and fair by disputants than are the rights-based procedures (Folger 1986).

Research has been conducted to evaluate the process and outcomes of mediations conducted prior to or in lieu of various public adjudicatory procedures in the United States (Bingham 1997; Brett, Barsness & Goldberg 1996; Feuille 1999; Kochan, Lautsch & Bendersky 2000; McDermott, et al. 2000). In all the studies, the mediations generated settlement rates between 60 and 80%, with higher degrees of disputant satisfaction about both the process and the outcomes than comparable adjudicatory procedures. Concerns that they result in objectively worse outcomes for participants because a public enforcement function has been privatized, or because mediators are concerned about case settlement rather than justice (c.f. Hensler 1994), have not been supported empirically. For instance, in a study of a Massachusetts state-level equal employment opportunity enforcement agency, Kochan, Lautsch and Bendersky (2000) demonstrated that when the time it takes from case filing to settlement is controlled for, outcomes in mediation and adjudicatory processes are not statistically different. In addition, all these evaluation studies demonstrate that mediation takes less time and, as a result, costs less financially and psychologically than do rights-based procedures.
The efficacy of interest-based neutrals is limited when they act independently, however. Evidence suggests that certain types of workplace conflict are more suitable for mediation than others (Kochan & Jick 1978). There may be issues at stake that have policy implications beyond the resolution of the individual dispute—as may be the case with an issue related to implementing a collective bargaining contract or systematic discrimination—that need public instead of confidential resolution. If interest-based neutrals are the only internal option, then a practitioner may be faced with taking on an advocacy role in the broader organizational interest or for disputants who cannot advocate for themselves. The practitioner might then violate his or her neutrality and damage his or her credibility in the process and be ineffective in future cases.

Negotiation

The third dispute resolution component is negotiation, and it covers all efforts by individual disputants to resolve conflicts themselves, without any third-party intervention (Lewicki, Saunders, & Minton 1999). Negotiation behaviors can vary from highly competitive to highly accommodating, and have been characterized by the attention one gives to their own outcomes and to those of the others (Blake & Mouton 1964; Thomas 1976). Interest-based negotiation has especially received a great amount of attention in the literature. Unlike traditional adversarial negotiations that often focus on distributive outcomes, which “divvy up the pie” and may leave value on the table, interest-based negotiations enable disputants to achieve more integrative outcomes that optimize joint value by “expanding the pie” (Harink, De Dreu: & Van Vianen 2000; Lewicki et al, 1999; Walton & McKersie 1965).

When successful, resolution by the parties themselves using negotiation processes is clearly the most efficient and least costly approach to organizational conflict management.
Individuals who may not come forward to use a rights-based or interest-based neutral type of component may be more likely to resolve conflicts on their own (Rowe 1997). It is hoped that by providing skills-training and making negotiation a workplace competency, employees will address the bulk of the conflicts they face on a day-to-day basis directly, without third-party intervention (Thompson 2000; Wall and Callister 1995).

Negotiation processes are not appropriate in all cases of workplace conflict. Power differences exist in organizations, even between hierarchical peers, due to different access to resources and informal status. Negotiation processes provide no security against negative repercussions, such as retaliation or damaged personal relationships, and no recourse if the other party disregards one's interests or refuses to negotiate. Individuals who are not confident in their negotiation skills or who face a conflict with a much more powerful individual may, therefore, be unwilling to use the informal processes. Furthermore, negotiation skills do not eliminate the zero-sum nature of some conflicts, and they alone cannot address the problems that arise when people realize there may still be unequal distributions of resources after a negotiation. In addition, negotiation skills are generally disseminated through widespread training interventions. Implementing the skills successfully takes practice, and an individual who participated in a single training program may be uncomfortable using the new skills in a real conflict situation. The reality of power differences in organizational contexts, and the difficulty of learning new skills mean that negotiation processes are not sufficient by themselves.

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Insert Table 1 about here

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ADDITIVE AND COMPLEMENTARITIES MODELS
Research on the effects of each of these types of components suggests that the introduction of any one of them may have positive effects on resolving workplace conflict relative to no explicit procedures in an organization. However, each individual type of component's capacity to address all workplace conflicts is limited. A number of case studies that have been conducted in the past two decades suggest that introducing multiple types of components in a single organization might be a more effective approach to workplace conflict management (Costantino & Merchant 1996; Ewing 1989; McCabe 1988; Rowe 1997; Slaikeu & Hasson 1998; Ury, Brett & Goldberg 1989; Westin & Feliu 1988). At this point, however, there is no theoretical explanation for this observation that could justify generalizing beyond the relatively few cases that have been described. Two potential theoretical models for the benefits of DRSs over individual and pairs of components with different implications for organizational practice and future research can be extrapolated from the literature: An additive model and a complementarities model.

Additive Model

If each type of component is indeed most effective for only certain types of conflicts or for certain people, then adding more types of dispute resolution components should increase an organization's capacity to manage more conflicts effectively (see Figure One). Each type of dispute resolution component emphasizes particular types of conflicts due to an artifact of their different theoretical orientations: Industrial Relations is normatively concerned with the interests and rights of workers and unions whereas Organizational Behavior concentrates more on managerial interests and rights. The scope of conflicts considered by each component is a result of a negotiated process among organizational stakeholders (e.g. employees, unions, and
managers), and they are not automatically combined because the underlying theoretical assumptions are so different that they rarely interact with one another intellectually or in practice (Brett & Hammer 1982).

Industrial Relations (IR) Assumptions about Workplace Conflict. Workplace conflict is at the core of IR theory. The earliest scholars identified with the field were motivated to write about the inherent conflicts of interests between workers and owners or managers of capital, which were developing with the industrialization of the Western world (Tucker 1978; The Webbs 1897). They argue that conflict cannot be eliminated because workers and managers in an industrial system have irreconcilably different interests (Barbash 1984; Commons 1934). Given the differences in interests, IR scholars assert that voice without formal power is meaningless. Since formal power is fundamentally imbalanced in the workplace, they have historically considered collective action (primarily trade unionism, political activity and strikes), voice (collective bargaining and grievance procedures), and labor laws as key institutions through which an equitable balance could be achieved in the ongoing struggle between the interests of workers and managers (Commons 1934; Goldberg, Ahern, Haber & Oswald 1977). Workplace relations, in which conflict is managed but not eliminated, are governed by a "web of rules" developed by the environmental, institutional and market context, social ideology, and ongoing negotiations among labor, management and government (Dunlop 1958; Kerr 1994). Thus, IR scholars have traditionally focused on vertical conflicts of interest between workers and managers within and across organizational settings, and on issues related specifically to the management of the employment relationship.

Organizational Behavior (OB) Assumptions about Workplace Conflict. The OB approach to conflict management evolved out of very different normative and theoretical assumptions
about conflict. Traditionally, OB scholars assumed that organizational conflict was dysfunctional and detrimental to individual satisfaction and group performance (see Lewicki, et al. 1999; Schwenk 1990 for reviews). Conflict was described as non-rational, sub-optimal and indicative of a breakdown in the system, creating the main deterrent to high performance and goodwill (Argyris 1962; Blake & Mouton 1984; Deutsch 1969; Pondy 1967). The traditional response has been to try to eliminate the sources of workplace conflict by aligning worker and manager interests and attending to employees' social as well as financial needs (Collins 1998; Mayo 1960).

Drawing on sociological theories of the positive functions of social conflict (Coser 1956 & 1967; Simmel 1955), other OB scholarship has developed a very different perspective on conflict, arguing that certain kinds of conflict may have positive effects on workplace productivity. Although interpersonally oriented conflicts may be detrimental to organizational functioning,² conflicts over tasks may have beneficial productivity impacts, particularly when managed collaboratively (Amanson 1996; Guetzkow & Gyr 1954; Jehn 1995 & 1997). In addition, different characteristics of the conflict or the context in which the conflict occurs may affect the likelihood that it will be resolved through functionally beneficial, cooperative means (Deutsch 1973; Boulding 1964). Many current OB scholars, therefore, call for the management, rather than the elimination, of workplace conflict (Thompson 2000; Van de Vliert & De Dreu 1994; Weingart & Jehn 2000).

While the current trend in OB to manage rather than eliminate workplace conflict is consistent with the IR tradition, the underlying assumptions are still quite different. Power differentials do not take nearly as central a role in the OB conceptualization of workplace conflict as they do in the IR one. Unlike IR, which focuses almost exclusively on vertical
conflicts between managers and workers, OB focuses almost exclusively on horizontal conflicts, between peers of workers, managers, or professionals, in which hierarchical power differentials are not so salient. In addition, whereas IR scholars focus on conflicts over the management of the employment relationship, OB scholars focus on conflicts over tasks and interpersonal relations.

Components’ scope. The scope of the different types of components evolved from negotiation among the competing interests and theoretical orientation of unions, employees and managers (Walton, Cutcher-Gershenfeld & McKersie 1994). Unions wanted to generate more consistency in conflict outcomes by standardizing dispute resolution procedures (Slichter, Livernash & Healy 1960). Since unions exert power through collective bargaining, employers conceded to their interests by establishing rights-based procedures (that may have some interest-based stages) with scopes constrained to those issues covered in collectively bargained employment contracts. This became the model used in many non-unionized organizations that established rights-based procedures as well. Employees tend to want to improve the fairness of conflict processes and outcomes (Lind, et al. 1993; Lind, et al. 2000). Employees may exert power individually by threatening to file costly external legal claims against employers and publicity campaigns. Thus, some employers initially implemented interest-based neutrals with scopes limited to those issues that might be filed externally if they are not resolved internally. In addition to reducing legal expenses, employers often want to improve employment relations and productivity. They generally prefer to rely on negotiations so that interpersonal and task issues are resolved effectively without escalation (Ewing 1989). Negotiation training interventions tend to be less expensive than implementing rights-based procedures or interest-based neutrals, and do not require managers to concede any decision-making power. They are, therefore, implemented to address a broad spectrum of conflicts.
While this is an overly simplified categorization (for instance, interest-based neutrals are often not limited to civil rights claims and are utilized as early stages in rights-based procedures), it illustrates the logic behind each component's concentration on particular kinds of conflicts. While IR and OB may never reconcile their underlying assumptions about workplace conflict, the integration of types of components in practice may still be more effective than the individual components, even if their domains are clearly delineated. The additive model is, therefore, that dispute resolution systems are more effective than individual and pairs of components because they provide a broader menu of options from which disputants can choose when deciding how to address a given dispute. The more options that are available, the more types of conflicts and individuals the system can effectively satisfy. Thus, there is a simple, linear relationship between the number of components and effective conflict management.

Additive Model: The more types of dispute resolution components offered by an organization, the more types of workplace conflicts can be managed and disputants satisfied, and the effectiveness of the system to resolve workplace conflicts grows linearly with the number of types of components.

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Insert Figure One about Here

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Complementarities Model

In contrast to the additive model, which does not rely on any interaction among the different components, the complementarities model proposes that the strength of a DRS comes from the reinforcing (or synergistic) interplay among the types of components (see Figure Two). While the idea that a whole may be greater than the sum of its parts is nothing new,
complementarities theory was specifically applied to organizational practices by Paul Milgrom and John Roberts in several papers in the early 1990's. They tried to explain why manufacturing firms tend to adopt technological, product line, and marketing changes simultaneously by arguing that interactions among these multiple activities generate positive synergies. Several activities are complementary if doing more of any one activity increases (or at least does not decrease) the marginal profitability of each other activity in the group (Milgrom & Roberts 1992: 108). Similarly, if the marginal costs of some activities fall, then it will be optimal to increase the level of all of the activities in the group because the direct and indirect effects of price changes tend to reinforce each other (Milgrom & Roberts 1990: 514). In addition to complementarities among the components, decisions about whether to implement some or all the components are affected by non-convexities that make the implementation of a single component unprofitable without the implementation of all components. Changes, therefore, are not a matter of small adjustments at the margins, but coordinated changes to the whole range of a firm's activities.

This theory has also been observed and empirically tested in the context of human resources policies. When implemented together in internally consistent bundles, multiple human resources policies--such as self-directed teams, training, and total quality management--have larger productivity, turnover, and morale effects than do the individual components or no high-commitment policies (Arthur 1994; Batt 1999; Huselid 1995; Ichniowski, Shaw & Prennushi 1997; MacDuffie 1995; Richard & Johnson 2001).

The complementarities theory has several implications relevant to DRSs. First, the power of a DRS may derive from the reinforcing interplay among rights-based procedures, interest-based neutrals and negotiation types of components. This suggests that the strength of a DRS comes not only from more options being available that can address a wider range of workplace
conflicts, but also because each component functions more effectively when it is reinforced by the others. Additionally, due to potential non-convexities, implementing only a subset of the DRS may be very costly because the benefits of the complementarities are lost. Rather than a linear relationship between implementing more components and performance, therefore, complementarities theory implies that there is a curvilinear relationship such that partial implementation may have negligible effects on performance.

Complementarities Model: The interplay among types of components generates reinforcing synergies that do not exist when an individual or pair of components is implemented. Positive effects of any dispute resolution components are only observable when the entire system is implemented simultaneously.

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Insert Figure Two about Here
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HYPOTHESES

In order to study the question of whether the benefits of DRSs derive according to the additive or complementarities model, I will present a series of hypotheses assuming the sequential implementation of types of dispute resolution components. Based on both models and existing research, each individual type of component should have some positive effect on outcomes relative to a baseline of nothing. I therefore start with a baseline of rights-based procedures, followed by negotiations, then interest-based neutrals. I assume that all three types of components affect conflict outcomes with similar weights. Therefore, it should not matter the order in which different types of components are implemented, but this is an empirical question that should be tested.
Furthermore, according to both the additive and complementarities model, there should be positive effects on all outcomes by adding the third type of component to the system. Thus, the key step with which to adjudicate between the two models is the change from one type of component to two. The additive model suggests that there should be a positive increment from one to two types of components. In contrast, the complementarities model suggests that there should be no significant increment in outcomes from one to two because without the full DRS, none of the components work optimally (refer back to Figures One and Two).

Broadly speaking the outcome of interest is the effectiveness of the components to resolve workplace conflict. Effectiveness can be broken down into affective and behavioral individual-level variables: attitudes towards conflict at work, pro-active efforts at addressing conflict (i.e. less conflict avoidance and more conflict negotiation), and conflict resolution. In each of the following sections, I will present research on the relationship between dispute resolution components in general and specific dependent variables. I will then offer two competing hypotheses to represent the expected effects of multiple components on each outcome according to the linear and complementarities models.

Attitudes

Before changing behaviors, dispute resolution interventions should affect more positive attitudes towards conflict. Individuals may understand what they should do differently in a conflict situation before they actually change what they do when they are confronted by such a situation (Fishbein & Ajzen 1975). Exposure to dispute resolution components may increase individuals’ feelings of efficacy and self-esteem. (Alper, Tjosvold & Law 2000; Duffy, Shaw & Stark 2000; Stevens & Gist 1997). They may be more confident in their conflict management
abilities, and less concerned that there will be negative repercussions for their efforts because proactive conflict management is viewed as a legitimate workplace activity. Thus, exposure to dispute resolution components should affect individuals’ overall attitudes, defined as: confidence, self-efficacy, and perceptions of procedural justice. The more types of components there are, the more positive individuals’ attitudes may be.

Hypothesis 1a: If the relationship between the number of types of components and outcomes is additive then compared to a single rights-based type of component, individuals’ attitudes towards conflict will be more positive when they are additionally exposed to negotiation components, and most positive when exposed to a full DRS.

Some training interventions designed to change individuals’ affective attitudes in the workplace have been less than successful, however. For example, in the absence of broader organizational supports, diversity-and sensitivity-training interventions appear to make race relations worse in organizations (Cornelius, Gooch & Todd 2000; Gilbert & Ivancevich 2000). Without full leadership support and accountability, diversity-training programs may be discontinued when funds become scarce and attention diverted elsewhere. Employees may view them as simply “flavor of the month” management fads (Gilbert & Ivancevich 2000). Thus an alternative hypothesis is that the incremental implementation of a negotiation-training program will not positively affect conflict attitudes.

Hypothesis 1b: If the relationship between the number of types of components and outcomes is complementary then compared to a single rights-based type of component, individuals’ attitudes towards conflict will not be significantly more positive when they are additionally exposed to negotiation components. Attitudes will only be significantly positive when individuals are exposed to a full DRS.
Avoidance and Negotiation

Individuals exposed to dispute resolution components are expected to take a more proactive approach to conflict management (Morrill & Thomas 1992; Lewicki, et al, 1999). The exact expression of this activity may vary from negotiation to mediation to filing grievances. Regardless of what they do, a measure of a dispute resolution intervention’s success is that participants do not avoid conflicts (de Dreu & Van der Vliert 1997; Fox 1987; Lewicki, Weiss & Lewin1992; Kuhn & Poole 2000; Morrison & Milliken 2000). I define conflict avoidance as acknowledgement that a conflict exists, but taking no direct actions to resolve it. It is possible that the more types of components there are, the less often will individuals avoid conflicts.

Hypothesis 2a: If the relationship between the number of types of components and outcomes is **additive** then compared to a baseline rights-based type of component, individuals will avoid conflicts less often when they are additionally exposed to a negotiation component, and least often when exposed to a full DRS.

The order of implementation I am presenting suggests that in both a two-component and a three-component system, individuals will be expected to negotiate when they have conflicts. Thus, an additional measure of success is whether or not individuals do indeed negotiate more frequently after exposure to different types of dispute resolution interventions. I define negotiation as any direct communication with the other party(ies) in an effort to resolve the conflict (Morrill & Thomas 1992; Lewicki, et al, 1999).

Hypothesis 3a: If the relationship between the number of types of components and outcomes is **additive** then compared to a baseline rights-based type of component, individuals
will negotiate conflicts more often when they are additionally exposed to a negotiation component, and most often when exposed to a full DRS.

Once again, however, organizational interventions designed to encourage employees to behave more proactively have been unsuccessful without significant organizational reinforcement. A summary of decades of evaluating joint union-management quality of work-life (QWL) and other innovative work practices suggests that these participatory programs are only effective when businesses adopt a comprehensive system of complementary innovative practices. Implementing quality circles or work teams alone does not necessarily change behaviors or have positive performance effects (Katz, Kochan & Gobille 1983; Ichniowski, et al. 1996; Macy & Izumi 1993; Wagner 1994). These studies suggest that the incremental implementation of negotiation training may not achieve significant behavioral results.

Hypothesis 2b: If the relationship between the number of types of components and outcomes is \textit{complementary} then compared to a baseline rights-based type of component, individuals will not avoid conflicts significantly less often when additionally exposed to a negotiation component. They will only avoid conflicts significantly less often when individuals are exposed to a full DRS.

Hypothesis 3b: If the relationship between the number of types of components and outcomes is \textit{complementary} then compared to a baseline rights-based type of component, individuals will not negotiate conflicts significantly more often when they are additionally exposed to a negotiation component. Their negotiation behavior will only increase significantly when individuals are exposed to a full DRS.

Resolution
Proactive conflict management should also increase the likelihood that conflicts will be resolved. Dispute resolution components enable parties to seek solutions to problems more effectively than can be discovered through coercion, avoidance, sabotage, or exit. Each type of dispute resolution component creates opportunities to explore integrative outcomes, or those that "expand the pie" to create joint value for negotiators (Walton & McKersie 1965; Lax & Sebenius 1986; Bazerman 1998). For example, integrative outcomes may be realized through obtaining additional resources from constituents, trading issues on which the parties have different priorities, providing compensation for unrelated issues, and exchanging considerable amounts of information (Pruitt 1983). Thus, dispute resolution components may enable parties to find integrative solutions to problems, and therefore resolve conflicts more often.

Hypothesis 4a: If the relationship between the number of types of components and outcomes is additive then compared to a baseline rights-based type of component, individuals will resolve conflicts more often when they are additionally exposed to a negotiation component, and most often when exposed to a full DRS.

Some research suggests that the pedagogical use of role-play scenarios in negotiation training does not necessarily make people more effective negotiators, however. Students seem to struggle to apply the underlying concept demonstrated by a particular role-play scenario to different contexts (Loewenstein, Thompson & Gentner 1999; Thompson, Gentner & Loewenstein 2000). Thus the incremental introduction of a negotiation-training program may not lead conflicts to be resolved significantly more often.

Hypothesis 4b: If the relationship between the number of types of components and outcomes is complementary then compared to a baseline rights-based type of component, individuals will not resolve conflicts significantly more often when they are additionally exposed
to a negotiation component. They will only resolve conflicts significantly more often when individuals are exposed to a full DRS

IMPLICATIONS

These two models of the relationship between the number of types of dispute resolution components and individuals’ attitudes, avoidance, negotiation and resolution behavior have very different implications for research and practice. If empirical tests support the additive hypotheses, then organizational leaders could make incremental changes to their dispute resolution options. This would allow them to commit additional resources only after an initial investment pays off, or implement only those components that address the specific types of conflict that are problematic in their organization. It implies a contingency theory is needed to advance research on DRSs. Academics would need to determine the optimal array of types of components given the needs of employees and managers particular settings. Reliable cost-benefit metrics are, therefore, necessary to help guide practitioners' implementation strategies. It is also possible that the needs of organizations vary systematically with certain identifiable characteristics. Thus, certain templates of optimal systems for different settings may be attainable.

On the other hand, if empirical tests support the complementary hypotheses, then the policy and research implications are quite different. Organizational leaders would be ill advised to implement anything short of a full DRS. Implementing individual or pairs of components may not pay off, and may even worsen dispute resolution processes and outcomes for their employees. An incremental change approach would be virtually doomed to failure, as the limited impacts of implementing the first component would not justify additional investment in other components, even if the full DRS would be highly beneficial. For academics, this implies more
of a universal model should be developed in which the exact nature of the curve were
determined. We need to determine if the results change if the components are implemented in
different sequences and all at once. Finally, we need to understand the interactive effect of the
components introduced by organizational leaders and informal practices that exist innately in
different settings to really enable theory to lead practice.

CONCLUSION

Throughout this chapter, I assume that the components are implemented with the highest
quality and integrity. I recognize that in practice they may be co-opted by the different parties, or
implemented with sub-standard quality, which could affect outcomes. I have adopted an ideal
model in developing these hypotheses, and the implications of different quality standards is
another important question for researchers, regardless of the relationship between the number of
types of components and outcomes in an ideal case.

Practice and research of DRSs need to better inform one another. At this point, practice is
leading research. Organizations are experimenting with new and better ways to deal with
workplace conflict without any theoretical or empirical guidance. With only anecdotal cases as
evidence, many organizational leaders are unconvinced that committing the necessary resources
to provide a full DRS will pay off. As academics, we need to better inform those decisions with
either a robust contingency model that can identify optimal configurations of components for
different organizational settings, or compelling evidence of a complementarities model to
encourage radical change initiatives.
FOOTNOTES

1 Other theoretical traditions have also contributed to the development of DRSs, such as the engineering systems design approach (Westin and Feliu 1988), the feminist approach (Kolb 1994; Rowe 1997), and the neo-Marxist approach (Hyman 1982). Given space considerations, however, this paper will not elucidate their specific contributions.

2 Transformative mediation is an interest-based neutral approach that considers the ability of mediation to improve relationships to be the most important and powerful aspect of conflict resolution (Baruch Bush & Folger 1994). Thus, they would disagree that all interpersonal conflict is bad for workplace productivity.
Table 1

DRS Components

<table>
<thead>
<tr>
<th>Types of Components</th>
<th>Rights-Based Procedures</th>
<th>Interest-Based Neutrals</th>
<th>Negotiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct Definition</td>
<td>Third-parties determine the outcome of a dispute based on laws, contracts or standards of behavior</td>
<td>Third-parties intervene in dispute processes to help the parties reach an agreement that meets their mutual interests</td>
<td>Efforts by individual disputants to resolve conflicts themselves</td>
</tr>
<tr>
<td>Examples</td>
<td>Arbitration; Formal Investigation; Peer Review; Grievance and Complaint-Handling Procedures</td>
<td>Mediators; Ombudsmen; Facilitators; Coaches</td>
<td>Interest-based; Adversarial Distributive; Integrative;</td>
</tr>
<tr>
<td>Appropriate Disputes</td>
<td>Legal or employment contract violations</td>
<td>Disputes that might otherwise be filed externally, such as discrimination and harassment</td>
<td>Interpersonal and task-related disputes</td>
</tr>
<tr>
<td>Limitations</td>
<td>Many conflicts excluded from process and inefficient screening mechanism</td>
<td>Potential advocacy damages efficiency and credibility</td>
<td>Leaves individuals vulnerable to retaliation and damaged relationships</td>
</tr>
</tbody>
</table>
Figure 1
Additive Model

Effectiveness

Number of Types of Components

0 1 2 3
Figure Two

Complementarities Model
CHAPTER THREE: RESEARCH DESIGN AND SETTING

This chapter describes the research design and the setting in which most of the data were collected for this dissertation. Research was conducted in a Canadian federal government agency (referred to as the “Agency”). The Agency redesigned its dispute resolution system after it changed status from a division of another department to an independent agency in 1999. Several of its rights-based recourse options were eliminated because the Agency was no longer included under certain legislation governing public sector employment. In particular, those that included recourse options for grievance, staffing, and harassment complaints for public sector employees, the final step of which were external review boards. The Agency formed a design committee to focus on replacing the staffing recourse option. They hired a consultant who was instrumental in convincing the design committee that they not only needed a replacement rights-based option, but also a whole new approach to dealing with conflict in the organization. Thus, the committee proposed implementing a DRS, with an emphasis on “changing the culture from a rule based organization to a value based organization” (internal interview). They did not provide a business case for doing so, in terms of estimated return on investment, but the Commissioner agreed to implement their proposal in full. Several members of the Office of Dispute Management (ODM) with whom I spoke attributed this decision to the fact that the Agency was undergoing many changes, and the various proposals did not benefit from much analysis or debate at the time. In other words, top leadership, “didn’t know what they were getting into” (internal interview).

Despite their relative ignorance about the model at the outset, the Agency invested considerable sums of money and staff resources to the design and implementation of the DRS. Because this approach is quite innovative and experimental, the Agency decided to first implement it in twelve pilot sites across the country. The central ODM gave each pilot site
guidelines and training, but the specific implementation of the DRS was left up to local decision-makers. Thus, there is some site-to-site variation within a common umbrella concept of the DRS.

The DRS has undergone several phases. The design committee initially conceived of it as an extensive, comprehensive DRS that included the union grievance procedure that had always been in place, plus extensive interest-based negotiation (IBN) training for all employees plus the introduction of local neutral service providers they called “dispute resolution advisors” (DRAs). Their recommendations were presented in June 1998. Each pilot site, however, interpreted the ODM recommendations differently, and implemented a variety of dispute resolution interventions that were active between June 1999 and March 2000. While all twelve pilot sites administered three-day Negotiation to all their employees, and three additional days of training to supervisors, managers, and union representatives, not all of the pilot sites introduced the DRA role. Therefore, while some of the sites had all three components of DRSs, others had only an RBP and Negotiation.

I was able to utilize this variation in the pilot treatments to conduct a multi-method, quasi-experimental study with matched pairs of cases. I matched two pilot sites (hereafter referred to as treatment sites) to two comparable sites that had not been part of the pilot, and therefore we not “treated.” The Agency was highly unionized, so every site had a traditional union grievance procedure already in place. Thus both of the comparison sites (creatively called “Comparison One” and “Comparison Two”) had the single grievance procedure, which acts as my baseline. The first treatment site was the “Negotiation” site. It is a two-component treatment site, with all employees receiving some amount of interest-based negotiation training in addition to the grievance procedure. The second treatment site is the “DRS Treatment” site. It is a three-
component treatment site, with the grievance procedure, the same negotiation training as in the Negotiation site, plus a DRA.

Thus by comparing dispute resolution processes in the Negotiation site to Comparison One, I can measure the impact of a training intervention on conflict behaviors. By comparing the DRS Treatment Site to Comparison Two, I can measure the impact of a DRS intervention on conflict behaviors. I can then compare the relative impact of the two different types of dispute resolution interventions (see Figure One). The results of this quasi-experiment are reported in Chapter Four.

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Insert Figure One here
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When the program was rolled-out nationally, funds were much more constrained, and the ODM opted to implement a severely curtailed version of the DRS. Much of the training and funding responsibilities were dispersed regionally, and instead of three-days of Negotiation, employees were given a one-day “awareness” session, and encouraged to pursue additional education on their own (that may or may not be reimbursed by their local offices). The DRA function was regionalized so that there was one DRA available for roughly every 3000 employees. The definition and logistics of this role were sufficiently ambiguous that it was effectively inaccessible for most employees. Nonetheless, I collected additional data from the employees in the two Comparison sites about 6 months after the awareness session had been conducted to see if there was any before-and-after training variation. The results of this longitudinal study are presented as Supplemental Study One in Chapter Five.
The Agency chose to conduct this project in a very transparent manner. They conducted internal preliminary evaluations and encouraged external evaluators such as myself to study the project. This commitment to transparency means the ODM was very helpful coordinating my study with the various sites and local liaisons, sharing their internal data with me, and paying for my travel and office expense incurred in the process of this study. In exchange, I presented them with reports of my findings from both phases of data collection, which were treated as interim evaluations of the program. In this chapter, I will begin by describing the initial conception of the DRS, then will describe the two pilot sites in my sample that represent different examples of local implementation, then describe the national rollout.

ORIGINAL DRS CONCEPTUAL STRUCTURE

The initial DRS was comprised of three components: preventative approaches which they define as “provid[ing] Agency staff with the skills and the climate required to communicate effectively with one another and thus avoid disputes”; interest-based approaches, which are divided into unassisted and assisted processes, and defined as “allow[ing] and encourag[ing] Agency staff to resolve their own problems quickly and informally by talking it out”; and rights-based mechanisms which “cover a range of regulated more formal processes like grievances. Binding decisions are handed down by third parties” (DRS Evaluation Framework, 2000: 4).

Preventative Options

Preventative options include creating awareness and educating employees about interest-based negotiation with site communication plans and incentives. At a minimum, every employee in the Agency had one full day of training, and every supervisor, manager and union
representative had an additional three days of more in-depth training that includes informal mediation and conflict-management coaching skills. Each site was encouraged to develop open-door policies, which were considered key to promoting communication with and between employees. The ODM identified key stakeholders at the national and local levels for this program (so-called “champions”) who draw attention to the DRS and maintain interest in it over time. The Agency identified creating a new culture that supports these conflict management activities as fundamental to the program’s long-term success.

Interest-based Options

Interest-based approaches include both unassisted mechanisms and assisted mechanisms. Unassisted interest-based conflict management basically means communication and negotiation between or among the disputing parties without outside intervention. Assisted interest-based approaches include mediation, coaching, informal fact-finding and neutral evaluation. On each site, “access points” are identified and trained as part of the DRS program design. They are responsible for being program champions, and well as providing assistance in interest-based processes. The specific individuals vary by site, but may include line managers, key employees, HR staff members, union representatives, and dispute resolution advisors. The dispute resolution advisor (DRA) position is recommended, but not required by the ODM. The DRA is an internal neutral who serves as an advocate for the DRS, coaches disputants, helps coordinate access to neutral services, and monitors the local program.
Rights-based Options

The DRS model assumes that interest-based approaches will be attempted prior to resorting to rights-based processes, but that is not a mandatory part of the process. Only one rights-based mechanism changed with Agency status shift, and it is the only one administered by the ODM. The staffing recourse option is for complaints specific to job staffing actions. The job staffing process itself changed with Agency status. Instead of competing for jobs based on relative scores on screening exams, employees tested into pre-qualified pools for a selection of jobs requiring the same basic skill sets. Once in the pools, employees were not ranked relative to one another, and did not need to take another exam for any position that was drawing from the pool. The biggest difference is that managers had much more leeway to select qualified employees based on criteria other than their test scores. While these changes had some benefits for both employees and managers, it was also considered less transparent and decisions could be based on favoritism rather than merit. At the same time, employees’ recourse options were limited. In the old system, complaints were based on an individual’s merit relative to all the other people who competed for the same position. Complaints immediately went to an external appeals board, included union representation from the beginning, and involved discovery that included the personnel records with respect to the competition for any candidate who was ranked higher than the complainant.

The new recourse option has three distinct phases, and union representation and external review is only available for those employees who make it to the final stage of the staffing process but are not selected for the position. Employees with complaints at any earlier phase of the staffing process, from qualifying into pools, to being selected for interviews can only get
feedback from the staffing manager and review by that person’s manager. These changes make the recourse process considerably more efficient, but the unions abhor constraints on their representation and independent review options.

Other rights-based processes have not changed except for the location of final decision-making. The grievance process related to the collective agreement progresses through four levels within the Agency: the Manager or Assistant Director, the Director or Director General, the Assistant Commissioner of the employee’s branch or region, and the Assistant Commissioner for the division of the Agency. If the grievance cannot be settled at that level, it is filed for adjudication at the external public sector staffing review board. The internal grievance process (for all non-staffing issues not related to the collective agreement) is the same except that the final level that considers a complaint is the Assistant Commissioner of the division of the Agency.

Workplace harassment complaints are lodged to the Assistant Commissioner, who launches an internal investigation and may invite the parties for mediation. Following the investigation and/or mediation, the Assistant Commissioner makes the final decision on disposition. The employee retains the right to submit the complaint to the external Canadian Human Rights Commission (which is similar to the EEOC in the U.S.), should the grounds be covered by the Canadian Human Rights Act. They can also file an internal grievance on the matter. Other external public enforcement agencies include: the Access to Information Commission, The Privacy Commission, the Public Service Commission for complaints related to second official language testing, and the Commission of Official Languages for language at work matters. See figure 2 for a diagram of the DRS at the Agency.
Pilot Phase Administration

With this framework of options, the ODM developed guidelines and training materials, but local design committees determine the specific design and implementation at each site. Thus, not all sites had exactly the same array of mechanisms.

Administratively, the DRS is quite decentralized, with the central Office of Dispute Management (ODM) acting as a coordinator and champion of the system. The ODM was established in April 1999, and employs eight full-time staff. According to the DRS Evaluation Framework document from February, 2000, the ODM:

Serves as a champion for the DRS, and works to build awareness and understanding of the system in its entirety. The office promotes the use of prevention and interest-based approaches, works to bring about the culture change required for these types of approaches to flourish, and coordinates the pilot projects. In addition, the ODM coordinates the Independent Third-Party Review process (pp. 7).

The ODM acted as a coordinator, promoter, and advisor to the pilot sites. They developed and circulated training materials, presented orientation sessions, and helped train internal or identify external facilitators to administer the training sessions. They had a CD 1 million budget for first 12 pilot sites. Each site proposed a budget to the ODM, and agreed to augment the ODM budget out of their local office development budgets.

National Roll-out

The ODM budget for the national rollout to the rest of the 45,000 employees was not much bigger than the pilot budget—roughly CD 1.2 million. In order to scale up, the ODM partnered with regional project teams and had them assume much of the responsibility for
training and communications. They developed project teams in each of the six regions using the pilot project as a model. The rollout model included a "train the trainer" process where 280 facilitators were trained who delivered the one-day "Demystifying Conflict in the Workplace" awareness session to all employees. 110 of these facilitators administered the three-day additional "How to Profit from Conflict" course for all managers, union leaders, and other access points. While local offices could choose to hire a DRA out of their own budgets, the ODM provided funds only for regional DRAs.

UNION STRUCTURE

Unlike many other cases of DRSs in the literature, the Agency is a heavily unionized organization, and the unions were central players throughout the design and implementation of the DRS. There are three unions representing employees in the Agency. I am calling the biggest the Alliance of Canada (AC). AC is subdivided into two units, the U-1 and U-2.1 The two unions historically represented different types of employees, but in recent years the lines have been blurred sufficiently that there is no way to identify to which union a particular employee belongs based on the nature of their work. In addition to AC, PU covers professionals (see table 1 for a breakdown by site). Employees at all levels, including the first-line supervisors (called "Team Leaders") and temporary employees with more than three-months tenure, are represented by unions.

PILOT SITES

The twelve pilot sites were identified beginning in June 1999. Pilot sites were selected to represent each region, and all the Agency business lines. The ODM worked closely with senior management throughout Agency to enlist twelve volunteer offices that met the design criteria. The pilot sites generally convened a joint union-management design team, which together

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1 I am using pseudonyms to protect the anonymity of the Agency and its workers.
selected a project leader to spearhead the program. Many of the pilot sites conducted an environmental scan with which to establish their baseline conflict environments. They were further responsible for developing a communication plan, planning and delivering training, appointing a DRA, instituting an open door policy, identifying and providing a range of interest-based neutral services, monitoring the system, and developing an evaluation plan to evaluate pilot site performance. Most of the pilot sites were set up by October 1999.

DRS Treatment Site

The DRS Treatment site did not automatically sign up for the pilot DRS project. Initial discussions among the Director, the union representatives and the management staff debated the amount of time and energy that would be necessary to invest in this project. As they discussed it further, however, they “realized that conflict is already there as part of the daily activity. Dealing with it takes energy anyway, so we decided it would be time well spent if we invested in this process and would be able to handle conflicts better. Then it was clear that this was something we should do.” Thus they agreed to be a pilot site starting in July 1999.

To choose a project leader, they drew up specific criteria for the position. Everyone in the office was considered for this position, and managers and unions together generated a list of candidates. From that list, they pared it down to six acceptable candidates, and the Director made the final decision. The steering committee was also set up at this time to provide direction for the project. Three managers, and five union representatives (three from U-1, two from PU) were on the committee. The Director used this structure to “forge a recognized partnership. The more union numbers were to balance the power inherent in the Director and managers.” The DRS was initiated with a town hall meeting led by the Director and each of the union Presidents. The Director wanted the unions to be present, side-by-side with him to eliminate skepticism. He
“didn’t want people thinking this was the flavor of the month that will pass in time.” The design team followed up with a letter from each of them.

They conducted two levels of training: Three days for all employees and an additional three days for all the access points (including the DRA, union representatives, team leaders and managers). 100% of employees who were on site at the time were trained. Union representatives and managers were identified as the network of access points.

They kept a stable DRA throughout the entire pilot project and afterwards. The DRA is the person who is the first contact most employees would have with the DRS. If they are going to resolve something one on one, they will either just do it themselves or ask the DRA or other access points for advice. Roughly 20 people came to the DRA to ask advice before pursuing a one-on-one negotiation during the pilot project. This advice ranged from coaching, to setting up meetings, to listening and talking through the process.

In addition, the DRS has been reinforced since the trainings by on-going oral and written communication. People “talk about it all the time.” Even after the pilot project officially ended, they continued the DRS unabated. The pilot DRA remained a visible and active champion for the program, and the site Director kept it on the agenda. One employee described the impact as follows: “In previous years, people either filed a grievance, or they buried it and felt there's nothing I can do to change it. The perception was that going the union route meant you were looking to ruffle feathers and cause problems. It was an extreme step. There were lots of things in the middle ground that weren't addressed and maybe could be handled more effectively with the conflict management stuff now.” The biggest problem with sustaining the program in the DRS Treatment site is “that there’s not enough conflicts.” Their pilot project budget was CD
90,000, but CD 30,000 of it was spent on hiring consultants from the Negotiation site to help develop training materials.

Environmental Scan

In October 1999, the DRS Treatment site hired a team of consultants to perform an environmental scan in order to have a benchmark against which to measure their program evaluation. 84% of employees responded to the survey, and 57% of them had already participated in the three-day Negotiation workshop. All answers were on a scale from 1 to 5, with 1 = a strong yes, and 5 = a strong no response. Thus, when interpreting means, the lower scores represent a more positive response (see Table Two).

The DRS Treatment site appears to have been a relatively open office before the DRS intervention was fully implemented, with fairly high respect and trust both between employees and supervisors and among coworkers. There is some suggestion that it is a conflict avoidant organization as well (for example, on average, people rated their abilities to “tell someone off” as a 3.3 (moderately disagree), and their distaste for being part of a conflict a 2.4 (moderately agree)). On the other hand, there seems to be little fear of getting in trouble for raising conflict issues to either the supervisor or union. In general, people seem more comfortable bringing a conflict to the attention of their supervisor than to their union representative, although it is hard to tell from these data if they are also likely to do so than try to resolve it themselves. There is also little difference between employees who got Negotiation and those who did not. The only significant differences were in the expected impact on the office climate of the DRS, fear of getting in trouble with the union for raising a conflict issue with a supervisor, and perceived amount of gossiping in the office. In sum, the DRS Treatment site appears to a have started off as
a relatively conflict-competent office, and the immediate effects of the Negotiation were negligible.

The same consultants conducted a similar survey again in June 2001. I compared data from these two surveys to determine if there had been significant changes within the DRS over time. 42% of respondents reported having used some interest-based negotiation technique since the inception of the DRS project. Of these, 68% were neutral to strongly pleased with the outcome, and 77% were neutral to strongly pleased with the process. Of those who did not use interest-based negotiation, 89% said it was because they had not had an opportunity to use it, compared to 52% who said they were uncomfortable trying it. Fully 96% of respondents who did not actually use interest-based negotiation during the project said they believed it was good for the office anyway.

I compared questions about people’s expectations of the effects of the DRS from the first survey to the assessment of the effects in the second survey. There was a significant difference in perceived climate change in the office (F = .227, p<.001), the ease of airing concerns (F=.005, p<.009), and fewer people saying they thought it would dig up “bad stuff” (F=.253, p<.032). There were no differences in the perceptions that the DRS would create more work for the unions, or work only for pushier people. There was also a significant increase in the perception that supervisors step in to fix problems (F= 2.779, p<.047), and a decrease in the perception that one would get in trouble for raising a problem with their supervisor (F=8.021, p<.005). There were no differences in fears of being labeled a whiner, getting in trouble with the union or getting in trouble with peers for raising conflicts. There were also significant improvements in people’s rating of how much respect and appreciation they get from their boss and peers.

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These data suggest that the DRS intervention affected real changes in the members' perceptions of conflict. The two studies compared projected perceptions of what would happen to retrospective perceptions of what had happened in the previous eighteen months, which is methodologically unreliable. Nonetheless, these data do indicate some significant improvements in some key relationships, especially between supervisors and subordinates.

Negotiation Site

The Negotiation site was established in early 1993, with a very participatory management philosophy. There is a long history of communication, team building and conflict management training efforts in this site, so that the DRS was a natural extension of their past history. Relations between the management and U-2 have always been fairly cooperative. U-2 is described as a less “militant” union than U-1 in general, and they have some flexibility that comes with being the only union to represent employees on the site. In 1997 every team in the building and their team leaders participated in facilitated team building exercises that included discussions about what constitutes a team, what makes a team, and what destroys team. Team leaders are now trained as facilitators and help the team make decisions. In 1998, they provided problem resolution training to team leaders because they felt that they were not dealing with conflicts on their teams very well. Prior to the Negotiation intervention, every team leader and union representative in the building had been exposed to interest-based conflict management techniques.
However, when the Director of the Negotiation site was approached to participate in the pilot project, he decided not to pilot it throughout the site because they were going through a lot of changes at the time. In addition to Agency-related changes, the office was reorganized in response to changes in the legislature. One division was not affected by those changes, and it alone was selected as pilot site.

The management team looked for a project leader for this pilot site who had a lot of respect around the division, and they wanted staff involved and a union representative on the design committee. An interest call was sent out and the management team chose from among those with the skills to lead the project. They tried to get a good diversity of staff, and consciously didn’t pick people who are always picked for projects. They ended up with a project leader (who was a team leader in the division), the Assistant Director of the division, one union representative, and three staff members. The project leader was given carte blanche to be full time on the project, and none of the other staff were restricted on how much time they worked on it.

The design team started with an environmental scan, that they decided to administer themselves, with the guidance of an outside consultant. All employees (approximately 190) were given the three-day interest-based training that was designed by the ODM. Access points had an additional two days of training. The design team developed an extensive communication plan, which included hiring a local radio personality to introduce the DRS on “launch day”. Like at DRS Treatment, the Director and other managers introduced the DRS along with the union representative and employee team members. A large banner was erected in the entrance lobby to the building, and design team members presented information about the DRS at all team meeting. All employees were given an “Open Door Culture” document, and copies were framed
and hung in every boardroom in the division. These documents defined the open door culture as
"an environment in which employees are able to approach one another, regardless of level, to
discuss a work-related issue, a complaint, or a personal problem in order to resolve disputes". Access points included team leaders, managers, EAP referral agents, union representatives, and
the dispute resolution advisor. A DRA, who was different from the project leader, was selected,
but has not been as visible a proponent of the DRS as the project leader has been. Neither of
them has been approached for help with interest-based conflict management processes since the
inception of the pilot project. In addition, conflict management has been included in a
"manager’s charter" that sets expectations to which people are held accountable. Due to the
amount of information that was being delivered throughout the 1998 - 2000 timeframe, there was
concern that staff was not sure of which initiative was driving each thing happening. They held
multiple focus groups and town hall sessions to try to keep staff informed of what was happening
and which initiative was driving it. Not all employees realized that the DRS was part of the
national Agency HR changes, rather than just a local initiative. The only concern that was
brought forward during the project that the staff didn't know how the team leaders wanted them
to deal with conflict. They wanted permission to deal with conflict directly themselves without
getting their team leader involved. CD 60,000 was spent on the Negotiation site’s pilot project.

My interviews in this site were more critical of the intervention than they were in the
DRS Treatment site. Although there was a great deal of effort communicating the project prior
to and during the training, there has not been much follow up or reinforcement. The first DRA
left and was replaced by the Assistant Director of human resources. This decision was a result of
the pilot project leader refusing the position on the basis that she “doesn’t like conflict and
doesn’t want to get involved any further than I already am.” The human resources department
was not directly involved in the pilot project, so assigning the Assistant Director of that department as the DRA was a way to bring them closer to it. However, HR represents management interests in employee relations, and the DRA is considered “too far away from employees, and no one associates him as a part of the project.” The Director of the site feels that an active DRA was neither necessary nor appropriate. He believes that conflict management is the direct responsibility of supervisors and managers, and fears that they would become dependent on a DRA to handle this key aspect of their jobs (internal interview).

Although the pilot project leader continued to remind people about the DRS in her team meetings, there was no systematic on-going presence that reinforced the interest-based processes at the employee level. Although the project team consciously decided against having any neutral service providers beyond their access points, some interviewees felt that they needed some kind of dispute resolution facilitator. “There’s no information saying don’t forget here’s an unbiased person to help you resolve this. No advertisement that there are neutral third parties available.”

With no neutral service providers, a resistant project leader, and an invisible DRA, the Negotiation site lacks a visible internal champion and cannot be considered a full DRS.

Environmental Scan

Unlike the DRS Treatment site, the Negotiation pilot program decided to conduct an environmental scan themselves, with guidance from external consultants. They also conducted their survey in October 1999, when about 20% of employees had taken the Negotiation so far. They surveyed 189 people, and got a 100% response rate by administering the survey during team meetings. "Handle one on one" means that the person with the concern would address the issue with the other party, "deal with it yourself" means that the person with the concern would not address the issue with anyone and would come to terms with it themselves. Therefore
“avoid” means people just ignoring the conflict. Behaviorally, avoid and deal with it yourself are the same. Survey results are in Table Three.

Although 30% of people reported that they generally handle conflict one on one, 54% of conflicts are avoided or dealt with alone. People tend to approach friends, colleagues and team leaders more often than a manager or union representatives for help. Of people who said they have conflicts at work, 50% more of them are task related than interpersonal. This survey indicates a high awareness of conflict management techniques and styles in this site prior to the full Negotiation intervention implementation.

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Insert Table Three here

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Additionally, they asked the 190 employees who participated in the training to evaluate its effectiveness in February 2000. 128 people responded, representing a 67% response rate (see Table Four). After participating in the training, employees reported that 45% plan to handle conflicts one on one, and 42% still expect to avoid or deal with conflicts themselves. Although this number only indicates intentions, not actual behaviors, it suggests that immediately following the training, employees were more aware of the desirability of direct negotiations. This survey also indicates that employees were using some of the specific skills they were taught, at least in the short term. It does not tell us whether this is a change from previous behavior, however. In sum, the training seems to have been quite positively perceived and successful.

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Insert Table Four here

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Pilot Project Evaluation

In June 2000, the ODM hired a research consultant to conduct a preliminary evaluation of the pilot project. This survey presents an opportunity to compare the two pilot projects in my study to the rest of the pilot projects across the country. Overall, they achieved a 49% response rate, but got 68% and 69% of their surveys back from the Negotiation and DRS Treatment offices respectively.

The survey asked about awareness of interest-based approaches, and the pilot project in general, how respondents received information about the pilot project, satisfaction with that information, participation in the training, satisfaction with the training, knowledge of different roles in the DRS, presence of people in the office who perform dispute resolution roles (i.e. access points, neutral service providers, and DRAs), experience and intended future use of interest-based approaches, helpfulness and future use of access points, neutral service providers and DRAs, awareness of recourse (or rights-based) options in the Agency, perceived impact of the DRS, and overall satisfaction with the DRS.

The distribution of answers across all twelve pilot sites indicates consistent implementation of the training program, but a range of different communications strategies. All but three sites had visible access points and DRAs. There was a pretty big range in terms of how many people had used an interest-based approach; from 9.2% to 47.1%. In each category, the Negotiation and DRS Treatment sites were very similar to one another, and either equal to or above the averages of the rest of the pilot programs. See Table Five for the total responses from all pilot sites, and responses from Negotiation and DRS Treatment pilot programs.
This preliminary evaluation of the pilot implementation indicates high levels of training in interest-based negotiations, though moderate application of the skills (only 15-20% of respondents had used IBN skills at the time of the survey). Although some respondents reported resolving conflicts directly, very few respondents had utilized third party assistance. There was general agreement that the use of interest based conflict management approaches would improve conflict dynamics in the pilot sites, except for the perceptions that there would be no repercussions or reprisals for raising conflicts. Despite the considerable differences in implementation, the DRS appears to have had similar short-term effects in these two pilot sites.

Role of Local Unions in Design and Implementation

In 1998 all the sites in this region participated in the Atlantic Union-Management Initiative (AUMI). This established a framework for informal union-management cooperation in the region. In particular, they outlined key objectives for any joint decisions. For instance, anything they do is for the benefit of the public sector, and should benefit the employees of the office, enhance viability as an office, and enhance the presence of the Agency in this geographical area. This is one of the most economically depressed areas in Canada, so any influx of jobs is in both their interests. With this foundation, the union-management relationships in all my sites were considerably more cooperative than they are on average throughout the Agency. Union and management representatives from all three sites credited the AUMI conference for breaking down barriers of misperceptions between unions and managers prior to the DRS project. For instance, a union representative from IBN Treatment site said the union and
management “has had ongoing consultation and partnership. [AUMI] opened the door to think about consultation before confrontation. We used to be reactive, now we are more proactive.” Likewise, a union representative from the DRS Treatment site said of AUMI, “It was really enlightening. We realized that when you cut through the crap then we all have the same goals and we're really committed to working together.” A manager from the DRS Treatment site said that AUMI, “kind of broke the ice so we don't always have to be adversaries. They have an agenda, so do we, so let's work together towards a compromise.” It also exposed participants to interest-based conflict management techniques, so that there was a baseline of awareness among unions and managers prior to the DRS project in all my sites.

In both pilots, unions were key members of the pilot dispute resolution intervention design committees, and the town-hall style communication models employed in both sites were presided over by both the site Directors and local union Presidents. Employees credited the union support as important to the legitimacy of the program. For example, on interviewee said, “if the union was involved in the design, they’re analysis of it makes it like a second opinion that it’s something to take seriously. If they endorsed it, I am more comfortable using it.”

National U-1 Boycott

In October 1999 the national U-1 boycotted the DRS pilot project because they felt like they were not included in the design of the DRS and the staffing recourse option, which limits union representation in staffing disputes, was an affront to the rights of its membership. In a letter from the national U-1 Presidents in the Atlantic regions, they stated, “On one hand, the Agency does not want the U-1 to represent its members in the Staffing Recourse BUT they do want the U-1 to help “roll out” the ADR that was developed by the AGENCY and does not include the U-1 in the process. That is why the U-1 is not involved in ADR” (original
emphasis). They felt that it was a contradiction for the management to say their policies were going to be open and transparent, but then not let a union review a manager’s staffing decision. Some of my interviewees on the management side admit that this concern is legitimate, because one of the key objectives of redesigning the staffing recourse option was to streamline the process by keeping union and other types of representatives out of the process until the very final stage. The Commissioners were unwilling to negotiate a change to this process with the national U-1 executive, so U-1 decided to pull out of the DRS pilot in protest of the whole procedure.

Some of the local U-1 executives disagreed with the national decision to boycott the whole DRS project, however, since they see it as fundamentally in the interests of their memberships. In most of the pilot sites where U-1 represents employees, the local union representatives were involved in the initial design and implementation of the DRS. Although they officially participated in the national boycott, informally some of the locals are encouraging their membership to use the interest-based options. The other unions in these sites, PU and U-2, agree with the principle behind the U-1 boycott, but not with their strategy. PU has filed a legal action against the Agency’s staffing process and recourse option, but participated in the DRS implementation. U-2 is trying to influence the process by “sitting at the table” with the Agency management.

By the time the DRS was rolled-out nationally, the U-1 executives and managers in the region where both pilot sites were located reached a compromise solution. After the initial “Demystifying Conflict in the Workplace” trainings, all subsequent three-day “Profiting from Conflict” training workshops were combined with an AUMI follow-up training workshop. The substance of the training workshops focused more attention on the rights-based process that had been “sidelined” in the DRS roll-out. “The only difference is that there’s more union
involvement in the AUMI process. It allows for more representative possibilities in dispute resolution.” Thus, the U-1 DRS boycott seems to have reached an uneasy truce in this region.

Unions in DRS Treatment Site

Prior to the AUMI conference, there was a very antagonistic union-management relationship in DRS Treatment, with lots of grievances filed. The AUMI conference and a new Director who began 5 years ago really turned around relations in the organization. By the time they were considering the DRS, DRS Treatment had a very open and cooperative union-management relationship in the site. Three of the five DRS design committee members were union representatives.

Since U-1 represents 80% of unionized employees in DRS Treatment, their participation was absolutely key to the pilot DRS project. The local U-1 president was personally invested in the project and is a strong supporter of the interest-based dispute resolution process. The national boycott forced them to pull out just after the training was administered. The local U-1 President wrote a letter to the national executive, cosigned with the Director of the site, to request that the DRS Treatment site be the exception since the pilot project really was a joint initiative. The letter said to let the local determine if their interests were being met before pulling out. Furthermore, the local executive asked the national to see if their ongoing participation in this pilot could be a forum to talk about the staffing process that could be used to bring it up nationally. However, their request was denied, and the local had no choice but to pull out of the pilot project after the training was completed since the national union could have seriously disciplined them if they went against the boycott. Now, they “aren’t encouraging or discouraging people from using it. If someone comes to file a grievance, I’d say let’s see if we can work it out first.” As an

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example of how they are walking the thin line between officially participating in the boycott and informally supporting the program, the list of access points that is posted throughout the DRS Treatment office lists contact information for PU union representatives, team leaders and managers, and has a note at the bottom of the page that reads, “U-1 executive members are not listed here as they are not available as part of the Interest Based Process. However, as always, they are available at all times for members to discuss concerns, represent them, and to give advice and direction regarding the rights based processes for disputes.”

Representatives of the other two unions decided that they agree with the principle behind U-1’s boycott, but that their members’ interests were best served by continuing to participate in the project and influencing its direction from the table. The U-1 President apparently keeps up on the process through his personal relationship with other union Presidents, and they try to represent U-1 member’s interests as best he can in the discussions. Therefore, although the boycott was clearly disruptive to the DRS Treatment pilot project, it did not derail it irreparably.

Unions in Negotiation Site

U-2 was a key part of the design team in the Negotiation site as well. When the Agency was established as an independent agency in June 2000, the Negotiation site employees voted to continue to have U-2 be the sole union representation for the site. Therefore, the U-1 boycott did not directly affect them the way it did the DRS Treatment site. U-2 made it clear that their concern with the staffing recourse option is separate from the interest-based skills, which are useful to all of its members. Only one of the six members of the Negotiation pilot project design team was actually a union representative, but three other members were non-managerial employees. All team members participated in communicating the negotiation intervention to the
division. Even though this was less explicitly a joint union-management initiative than it was in DRS Treatment, the U-2 representative and other employee participants were visibly involved in designing and supporting the process. In addition, all union representatives were identified and trained as dispute resolution access points. Thus, in the Negotiation case, the union has been an important ongoing member of the dispute resolution project.

NATIONAL ROLL-OUT

The Agency scaled-up the pilot project to a national program in April 2000. It utilized a regional implementation strategy wherein the ODM partnered with the Assistant Commissioners in each of the seven regions across Canada. Each Assistant Commissioner identified a Dispute Resolution Coordinator to work with the ODM as a liaison and to develop and implement their regional rollout plan.

The main part of the rollout was a one-day “Demystifying conflict in the Workplace” awareness training that was administered to all 45,000 AGENCY employees. It was substantively different than the three-day skill training that was implemented in the pilot sites, in that it was designed to develop awareness of interest-based conflict management within the Agency rather than build interest-based skills among participants. Managers, team leaders, union representatives and other access points also took a three-day “Profiting from Conflict” skill training that included informal intervention and facilitation guidelines. The regions were responsible for coordinating, administering and paying for the training in each site. The ODM trained all the facilitators of the awareness sessions so that it would be standardized across sites.

The idea of this approach is that the awareness training would pique the interest of some employees, who would be supported in their efforts to expand their negotiation and conflict
management training independently. When the awareness training is reinforced by performance competencies and supervisor reinforcement of interest-based conflict management techniques, its practice should disseminate throughout the Agency. This design makes support services, such as dispute resolution advisors, access points, and other cultural change efforts, even more essential than they were in the pilot project because individual employees have considerably less training. However, the implementation of those additional resources was left up to the ad hoc preferences of each local and regional design team. Thus, there was again variation in the extent of the conflict intervention in the national roll-out.

Comparison One

The Comparison One group was selected because it was a close match to the Negotiation Site. They administered their one-day training to all employees in January 2001, and the additional three-day training to access points in February. They formed an advisory board, with representatives from management, unions, and dispute resolution facilitators, and built a dispute resolution system site on their intranet. The training was kicked off with an e-mail from the site director, promotional items with the “Let’s Talk” logo, and a communication packet each employee received at the training. Despite the considerable attention given to the training process at its outset, there had been no formal follow-up as of October 2001, when I collected my last round of data. The Director and ODM were in the process of collecting information from staff about what kind of follow-up they would find most helpful to reinforce the training.

The Comparison One site opted not to invest in a local DRA for philosophical reasons. The steering committee believes that a DRA would hinder the dissemination of responsibility throughout the organization because people would use it as a crutch. Instead of a single DRA, the
Comparison One site charged each access point with acting like a DRA, and formalized this responsibility in their Management Charter. Thus, there is no one visible champion present on site. The steering committee at the Comparison One site is more interested in a regional DRA, however, to provide support and neutral services for the more difficult situations that arise. They are currently discussing this potentiality with the regional Dispute Resolution Coordinator, and may try to develop a structure similar to EAP, with local representatives who help coordinate with a regional service provider. This is all speculative at this point.

At the time of my data collection, I found reason to critique this approach. It relies on the visibility and engagement of all local access points to provide new conflict resources for employees. Those who are concerned with the neutrality of their team leader to act as an access point should know about alternative people they could go to for assistance with a conflict. There should be some indication that when an access point is approached to help with a conflict situation, they behave differently than they did prior to their training. Thus, I looked for awareness of new conflict resources, and found none. I looked for awareness of who the access points were, and found vague recollections of them being mentioned in the training but no subsequent advertisement. I looked for follow-up communication or other ways in which the awareness session had been reinforced, and found none. For example:

"I asked my team what they thought of the DRS rollout. The immediate reaction was blank stares. I said, remember the one-day demystifying conflict session? They said, it was a day off of work. It was nothing new. That's not what life was like in the real world. I asked if there has been any kind of follow up since then, and they said absolutely none."

Additionally, the resources that were available, particularly team leaders, weren't always appropriate or skilled themselves. A term employee told me about her team leader wanting to "practice her new skills" by mediating a conflict she told her about.
"What she did went way beyond what I understand the role of a team leader should be. She wasn't neutral, she shouldn't have been trying to mediate a situation like this. As a term, I couldn't say no, then I would have been assessed as uncooperative."

The outcome was extremely unsettling to this employee, and from her perspective, the well-intentioned team leader did more harm than good by intervening. Numerous other employees also mentioned their preference to have neutral conflict services available for both coaching and intervention so that their conflict experiences would not affect performance reviews and contract renewal decisions.

Comparison Two

Comparison Two was selected because it was a close match to the DRS Treatment Site. It completed the one-day training in March 2001 and its three-day training in April 2001. The local planning committee included representatives from management, U-2, PU, and interested employees. U-1 did not participate in the DRS until after this round of training when it was combined with AUMI for subsequent union and management training. They did not actively protest it either. A project leader was identified, and acted as champion throughout the training process. Shortly after its completion, however, she transferred to a different Agency facility, and her replacement was not named until late September. While the intentions of the Comparison Two rollout included a visible local champion (who was not the same thing as a DRA), this was not practiced for most of the time frame of this study. The treatment, therefore, was very similar to what was implemented in the Comparison One site, but the absence of a local champion was for logistical, rather than philosophical reasons. At the time of my data collection, the new project lead had just been identified, and was starting to take care of communication and follow-up objectives that had fallen by the wayside in the interim.
The original project leader conducted a preliminary evaluation and determined that the initial communication strategies employed by the Comparison Two site had generated awareness of the dispute resolution system. People I interviewed also reported their attitudes and awareness of conflict had changed as a result of the workshops. However, the recommendations of the original project lead to follow-up through various communication media were not acted upon until a new project lead was identified nearly four months later. Similarly to the Comparison One site, therefore, the attention that accompanied administering the “Demystifying Conflict” and “Profiting from Conflict” workshops rapidly waned. Except for the recently appointed new project lead, Comparison Two employees did not recognize access points as new conflict resources. “The resources available to people for resolving conflicts now are no different than they have been all along.”

Overall, the responses were more positive in Comparison Two than they were in Comparison One. I attribute this mostly to the new project leader symbolizing the leadership’s commitment to supporting people’s conflict efforts. Respondents were generally positive about the workshops, and hoped the new project leader would provide the kind of reinforcement and support that many of them were wanting.
Table 1: Union breakdown by site

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<th>U-1</th>
<th>U-2</th>
<th>PU</th>
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<tbody>
<tr>
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<td>--</td>
<td>100%</td>
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</tr>
<tr>
<td>Comparison One</td>
<td>--</td>
<td>100%</td>
<td>--</td>
</tr>
<tr>
<td>DRS Treatment</td>
<td>80%</td>
<td>3%</td>
<td>17%</td>
</tr>
<tr>
<td>Comparison Two</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
</tr>
</tbody>
</table>
Table 2: DRS Treatment Site Environmental Scan Results

<table>
<thead>
<tr>
<th>Item</th>
<th>Total</th>
<th>Training</th>
<th>No Training</th>
<th>F-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>13a. [I think the IBN system will] improve the general climate of relations in the office</td>
<td>2.4 (1.1)</td>
<td>2.0 (.9)</td>
<td>2.8 (1.1)</td>
<td>12.8 p &lt; .001</td>
</tr>
<tr>
<td>13b. . . . provoke more business for the union</td>
<td>3.6 (1.0)</td>
<td>3.7 (1.0)</td>
<td>3.4 (1.0)</td>
<td>1.3 p &lt; .251</td>
</tr>
<tr>
<td>13c. . . . improve my chance to air my job-related concerns</td>
<td>2.6 (1.1)</td>
<td>2.5 (1.0)</td>
<td>2.8 (1.2)</td>
<td>.9 p &lt; .322</td>
</tr>
<tr>
<td>13d. . . . only work for outspoken types of people</td>
<td>3.0 (1.2)</td>
<td>3.2 (1.2)</td>
<td>2.8 (1.1)</td>
<td>2.6 p &lt; .111</td>
</tr>
<tr>
<td>13e. . . . dig up feelings or lead people to say things that are better left unspoken</td>
<td>3.3 (1.1)</td>
<td>3.5 (1.2)</td>
<td>3.1 (1.1)</td>
<td>2.4 p &lt; .125</td>
</tr>
<tr>
<td>11. In the last two years or so, how many times have you felt cheated by a supervisor’s or manager’s decisions?</td>
<td>1.9 (1.0)</td>
<td>2.0 (1.0)</td>
<td>1.7 (.9)</td>
<td>1.8 p &lt; .178</td>
</tr>
<tr>
<td>18a. when trouble develops in the office, my supervisor is too slow to step in.</td>
<td>3.8 (1.2)</td>
<td>4.0 (1.0)</td>
<td>3.6 (1.3)</td>
<td>2.0 p &lt; .158</td>
</tr>
<tr>
<td>18b. My supervisor goes after the troublemakers to fix a situation</td>
<td>2.6 (1.2)</td>
<td>2.5 (1.2)</td>
<td>2.6 (1.2)</td>
<td>.2 p &lt; .693</td>
</tr>
<tr>
<td>18c. [If I brought a problem to my supervisor] I’d be labeled as a “whiner” or “complainer” or “poor team player”</td>
<td>4.0 (1.1)</td>
<td>4.1 (1.2)</td>
<td>3.9 (1.1)</td>
<td>.3 p &lt; .577</td>
</tr>
<tr>
<td>18d. . . . I’d get in trouble with the supervisor</td>
<td>4.4 (.9)</td>
<td>4.5 (.9)</td>
<td>3.4 (.9)</td>
<td>.3 p &lt; .577</td>
</tr>
<tr>
<td>18e. . . . I’d get in trouble with my union</td>
<td>4.3 (1.0)</td>
<td>4.5 (1.0)</td>
<td>4.0 (1.0)</td>
<td>4.1 p &lt; .047</td>
</tr>
<tr>
<td>18f. . . . I’d get in</td>
<td>3.7 (1.1)</td>
<td>3.8 (1.1)</td>
<td>3.5 (1.1)</td>
<td>1.3 p &lt; .265</td>
</tr>
<tr>
<td>Problem</td>
<td>4th Year</td>
<td>5th Year</td>
<td>6th Year</td>
<td>Significance</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>--------------</td>
</tr>
<tr>
<td>20f. If I had a serious complaint, I'd go to the union before I'd go to my supervisor</td>
<td>4.2 (1.2)</td>
<td>4.0 (1.2)</td>
<td>4.3 (1.2)</td>
<td>.4 p &lt; .523</td>
</tr>
<tr>
<td>20g. [If I brought a problem to the union], I'd get in trouble with my supervisor</td>
<td>3.9 (1.1)</td>
<td>4.0 (1.1)</td>
<td>3.8 (1.1)</td>
<td>1.0 p &lt; .320</td>
</tr>
<tr>
<td>20h...I'd get in trouble with my coworkers</td>
<td>4.0 (.9)</td>
<td>4.0 (1.0)</td>
<td>4.0 (.8)</td>
<td>.0 p &lt; .911</td>
</tr>
<tr>
<td>23g. I believe in saying exactly what's on my mind to employees who give me grief</td>
<td>3.3 (1.3)</td>
<td>3.1 (1.2)</td>
<td>3.6 (1.4)</td>
<td>2.3 p &lt; .131</td>
</tr>
<tr>
<td>23h. People in this office gossip about each other's personal life.</td>
<td>2.8 (1.3)</td>
<td>2.6 (1.2)</td>
<td>3.1 (1.3)</td>
<td>3.3 p &lt; .074</td>
</tr>
<tr>
<td>23i. There is backstabbing in this office</td>
<td>3.0 (1.3)</td>
<td>2.9 (1.3)</td>
<td>3.1 (1.4)</td>
<td>.7 p &lt; .409</td>
</tr>
<tr>
<td>27a. [I'm the type of person who] can tell somebody off</td>
<td>3.3 (1.4)</td>
<td>3.1 (1.4)</td>
<td>3.6 (1.4)</td>
<td>2.7 p &lt; .107</td>
</tr>
<tr>
<td>27c...can't stand being a part of a conflict</td>
<td>2.4 (1.2)</td>
<td>2.4 (1.1)</td>
<td>2.3 (1.3)</td>
<td>.3 p &lt; .609</td>
</tr>
<tr>
<td>27l. My supervisor respects me</td>
<td>1.6 (.9)</td>
<td>1.6 (.9)</td>
<td>1.7 (.8)</td>
<td>.2 p &lt; .669</td>
</tr>
<tr>
<td>27n. Most fellow-workers in my team respect me</td>
<td>1.8 (.8)</td>
<td>1.8 (.9)</td>
<td>1.8 (.8)</td>
<td>.1 p &lt; .841</td>
</tr>
<tr>
<td>N</td>
<td>84</td>
<td>48</td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>
### Table 3: Negotiation Site Environmental Scan Results

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Distribution</th>
<th>N</th>
</tr>
</thead>
</table>
| What types of conflict are you personally dealing with in the workplace? | 47% none  
32% work-related  
15% interpersonal                          | 211 |
| Does this conflict affect your work?                                    | 28% yes  
61% no                                           | 187 |
| How do you most often deal with conflict?                               | 24% Avoid  
30% Handle one on one  
30% Deal with it myself  
9% Go to the team leader/supervisor  
3% Go to the union       | 205 |
| Since joining Rebates, have you approached any of the following resources to help you deal with conflict? | 3% union rep  
20% team leader  
6% manager  
22% colleague  
23% friend                                                       | 281 |
| Do you feel that taking an IBN workshop would help you deal with conflicts in the workplace? | 81% yes  
19% no                                               | 187 |

### Table 4: Negotiation Site Training Evaluation

<table>
<thead>
<tr>
<th>Question</th>
<th>Distribution of Answers</th>
<th>N</th>
</tr>
</thead>
</table>
| Do you feel the IBN approach to resolving conflict is of value to you?  | 87% yes  
23% no                             | 128 |
| After participating in the workshop, how do you anticipate you will most often deal with conflict? | 16% avoid  
9% go to team leader  
1% go to management  
45% handle it one on one  
1% go to union  
26% deal with it myself          | 165 |
| Since taking the workshop, have you used any of the following skills?  | 35% Active listening  
15% I statements  
9% Reframing  
6% IBN  
25% Confirming understanding | 239 |
| Can you explain IBN to someone else?                                    | 75% yes  
21% no                                         | 128 |
Table 5: Pilot Project Initial Evaluation

<table>
<thead>
<tr>
<th>Question</th>
<th>Total</th>
<th>DRS Treatment</th>
<th>Negotiation Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were you provided with training on the IB approaches? (% yes)</td>
<td>87</td>
<td>98.5</td>
<td>95</td>
</tr>
<tr>
<td>Have you had a dispute in the workplace that has been dealt with through and IB approach? (% yes)</td>
<td>18.9</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>[If yes, was the dispute resolved through] unassisted IB (settled between parties involved)? (n)</td>
<td>130</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>...using access points? (n)</td>
<td>22</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>...neutral service providers? (n)</td>
<td>33</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>...using dispute resolution advisor? (n)</td>
<td>18</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>[Indicate the extent to which you agree or disagree that each of the following will result from the implementation of an IB approach:] faster resolution of problems (1= completely disagree, 4= completely agree (mean (SD))</td>
<td>3.08 (.73)</td>
<td>3.10 (.74)</td>
<td>3.25 (.60)</td>
</tr>
<tr>
<td>...improved dialogue between employees and management (mean (SD))</td>
<td>2.98 (.84)</td>
<td>3.05 (.78)</td>
<td>3.05 (.74)</td>
</tr>
<tr>
<td>...improved dialogue between employees (mean (SD)).</td>
<td>3.01 (.75)</td>
<td>3.11 (.78)</td>
<td>3.18 (.64)</td>
</tr>
<tr>
<td>...fair and</td>
<td>2.94 (.77)</td>
<td>2.96 (.69)</td>
<td>3.09 (.64)</td>
</tr>
<tr>
<td>Reasonable Solution of Problems (mean (SD))</td>
<td>3.00 (.85)</td>
<td>2.98 (.87)</td>
<td>3.18 (.80)</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>Fewer formal grievances (mean (SD))</td>
<td>2.50 (.89)</td>
<td>2.52 (.94)</td>
<td>2.61 (.78)</td>
</tr>
<tr>
<td>Problems/concerns raised without fear of reprisal (mean (SD))</td>
<td>2.60 (.91)</td>
<td>2.87 (.82)</td>
<td>2.81 (.80)</td>
</tr>
<tr>
<td>Improved union/management relations (mean (SD))</td>
<td>2.74 (.83)</td>
<td>2.85 (.83)</td>
<td>2.93 (.66)</td>
</tr>
<tr>
<td>Increased teamwork among employees (mean (SD))</td>
<td>2.92 (.63)</td>
<td>2.94 (.59)</td>
<td>3.02 (.53)</td>
</tr>
</tbody>
</table>

| N (response rate) | 933 (49%) | 65 (69%) | 101 (68%) |
**Figure 1: Research design**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Baseline Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pair 1</strong></td>
<td><strong>Pair 2</strong></td>
</tr>
<tr>
<td>Rights-based + Negotiation (&quot;Negotiation&quot;)</td>
<td>Rights-based + Negotiation + neutral (&quot;DRS&quot;)</td>
</tr>
<tr>
<td>Rights-based only (&quot;Comparison 1&quot;)</td>
<td>Rights-based only (&quot;Comparison 2&quot;)</td>
</tr>
</tbody>
</table>
CHAPTER FOUR: QUASI-EXPERIMENTAL ANALYSES

In Chapter Two I offered two competing models to explain the effectiveness of three-component dispute resolution systems compared to individual and pairs of components. The first model is additive, in that there could be a linear relationship between the number of components and performance because a broader menu of resolution options should more effectively serve a diverse population and address more workplace conflict than any single component can. The second model is complementary, in that the relationship between the number of components and performance may actually be curvilinear due to reinforcing synergies among the components. To determine the explanatory power of these two models, I presented four pairs of hypotheses: The relationship would be additive if individuals in an organization with a system of both rights-based and negotiation-types of components had (H1a) more positive attitudes, (H2a) less conflict avoidance, (H3a) more conflict negotiation and (H4a) more conflict resolution than individuals in an organization with only a rights-based process, and if the effects were even greater in a three-component DRS. The relationship would be complementary if (H1b) attitudes were more positive, (H2b) conflicts avoided less, (H3b) conflicts negotiated more, and (H4b) conflicts resolved more than in an organization with a rights-based process only in a three-component DRS. These hypotheses predicted a non-significant effect of a two-component system relative to a single rights-based procedure.

In this chapter, I present the methods and results of the quasi-experimental study described in Chapter Three (refer back to Figure One from that chapter). I operationalized a single component grievance system as the two comparison sites in the Agency, the two-component grievance plus negotiation system as the Negotiation site in the Agency, and the three-component DRS as the DRS Treatment site in the Agency. At the time these data were
collected, the two treatment sites had been exposed to their dispute resolution components for approximately eighteen months.

METHODS

Dependent variables were collected from interview and survey reports of individuals' conflict incidents. I used multiple data sources because there is much to learn about the specifics of the intervention in each site (see Figure One for a timetable of data collection efforts). Between October 2000 and February 2001, I conducted 73 hour-long, semi-structured interviews in the four sites with employees, site directors, project leaders, HR managers and union representatives (see Appendix A for a list of interview questions). These interviews helped to develop my qualitative understanding of the local conflict history, dispute resolution intervention, usage and perception. Text units from the interviews were inductively coded using QSR Nudist software to help develop the survey instrument and generate suggestive evidence of the effects. I also collected documentary evidence of the design and implementation process from each site and the central ODM.

This method assumes the two sites in each matched pair were identical prior to the differential treatment (Tilly 1984; Lieberson 1992; Locke & Thelen 1998). Demographic characteristics of employees in the four offices are presented in Tables One and Two. In addition, I used data that were collected by the Agency in May 1999 in a Public Service Employee Survey as a proxy-pre-test (Cook & Campbell 1979). Comparing these data across the DRS Treatment Site and Comparison Two provides an objective test of their a priori similarity. The Negotiation Site and Comparison One are two divisions within the same office, so I assume that they start off identically because there is not much differentiating them within the same physical space.
The Survey Instrument

I administered a survey instrument to all on-site employees in the DRS Treatment Site (n = 101) and Comparison Two (n = 103) and to a sample of 105 individuals, representing 75% of the Negotiation Site, and 100 individuals, representing 80% of Comparison One in January 2001. The instrument was designed to solicit detailed information about a specific conflict experience, and general information about team dynamics, communication, and attitudes toward conflict (see Appendix B for full survey instrument).

Coding. This survey instrument elicited data for both dependent and independent variables. In order to minimize response-response bias, key dependent variables were asked in both open and closed-ended forms. The information from the open-ended questions was pulled off the surveys, and coded by four blind raters who achieved a .677 (p<.000) Cohen’s Kappa measure of inter-rater reliability.² The four raters were trained to use common definitions of the terms, then rated each of the open-ended responses for the prevalence of relevant characteristics on a 1 to 5 Likert-type scale (see Appendix C for rating forms). The coded open-ended responses were all significantly correlated with respondents’ own closed-ended responses to the same

² Landis and Koch (1977) suggest that any kappa value between .61 and .80 be interpreted as “substantial” agreement (p. 165).
questions (see Table Three), demonstrating high convergent validity of the constructs (Schwab 1999: 41-43).

Variables. Independent variables were dummy variables representing for treatment site, matched pair and the interaction between them. Principle components factor analysis was used to generate dependent and control variable scales used for analyses (see Appendix D for specific items used in variable scales). The attitude variable was a ten-item scale (Chronbach’s Alpha = .89) comprised of closed-ended questions about confidence, legitimacy and procedural justice perceptions of addressing conflicts in the workplace. Conflict avoidance and negotiation were analyzed using the coded ratings of open-ended responses. Despite the high convergent validity between the coded open-ended ratings and closed ended reports on these questions, when indexed together the Chronbach’s Alphas were below .70, which is the cut off point I used (Black, 1999). I elected to use the coded open-ended responses because they had an element of inter-rater reliability. I did not end up using all the conflict resolution strategies that were coded because of insufficient data. The resolution dependent variable and the manager and age control variables were each based on single closed-ended items. Both relationship and task conflict control variables were analyzed based on scales combining the open- and closed-ended responses to those questions, because their Chronbach’s Alphas were above .70 (.70 and .79, respectively). Although I coded the open-ended questions for peer-to-peer and supervisor-subordinate conflicts, neither variable improved the R² of the equations when they were included, nor ever had a significant effect. I therefore left them out of the final analyses.

-----------------------------

Insert Table Three here

-----------------------------
RESULTS

Proxy Pre-Test

The Public Service Employee Survey included questions about service to clients, collaboration and decision-making, sharing information, realizing a shared vision, nature and quality of work, workload, working in a respectful, supportive environment, working in an ethical, fair and inclusive environment, careers in the public service, and training and learning needs. In Table Four I report the responses to ten questions that I determined were related to workplace conflict from all Agency employees, from all employees in the region, and from employees in each site. Data from the Negotiation and Comparison One sites could not be differentiated, so are pooled. The research sites are slightly below the national and regional mean on most of the questions. Furthermore, the DRS Treatment Site and Comparison Two tend to be more similar to one another than either of them is to the combined scores of the Negotiation Site and Comparison One. Finally, F-tests comparing responses from the DRS Treatment Site and Comparison Two indicate significant differences at the $\alpha = .05$ level on only two questions: employees’ experiences of harassment and discrimination at work. Despite the importance of these issues, in both cases, the mean response of both sites is less than two (on a scale from one equals strongly disagree to five equals strongly agree), but the DRS site respondents report more of it in both cases. Nonetheless, the results suggest that employees from neither site experienced much harassment or discrimination. In sum, while I do not discount the importance of prior differences in employees’ experiences of workplace harassment and discrimination at work, given the low occurrence of the reported incidents, and the equality on all other questions,
overall this proxy pre-test supports the \textit{a priori} similarity of DRS Treatment Site and Comparison Two.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
\textbf{Label} & \textbf{Value} & \textbf{Unit} \\
\hline
\end{tabular}
\caption{Table Four here}
\end{table}

Response rates and non-response bias

The 73 interviews I conducted in the four sites represent between 12 and 20\% of the population in each site. In addition, 322 out of the 409 surveys I distributed were returned, representing a 78\% response rate (see Table Five for a breakdown by site). Of these, 38\% were missing data from a section of the survey that asks people to describe in detail one conflict they have had at work in the past 18 months. Subsequent quantitative analyses use the smaller sample of 201 completed surveys, for an effective 62\% response rate.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
\textbf{Label} & \textbf{Value} & \textbf{Unit} \\
\hline
\end{tabular}
\caption{Table Five here}
\end{table}

I conducted logit analyses to test for differences between those who filled out the survey instrument in full and those who did not by fear of negative consequences, managerial status, temporary contract status, tenure, age and sex. I conducted the analyses in total, broken down by pair and in each site (see Table Six). I found that managers were generally more likely to fill out the survey than non-managers, and younger people tended to fill out the survey more often than older people. Additionally, in the DRS Treatment Site only, temporary employees were more likely to fill out the survey than permanent employees, and in Pair Two, people who expressed more fear of negative consequences for having workplace conflicts were more likely to fill out
the survey. I included manager and age as control variables in subsequent regression analyses, but since fear and temporary contract status only appeared to be significant in one of the analyses, I did not include them as control variables.

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Insert Table Six here

---------------------

Manipulation check

In order to check that individuals in the treatment sites recognized that they had been exposed to the dispute resolution interventions, I asked them how much training in interest-based negotiations they had received from the Agency (see Table Seven for results). The dummy variable indicating treatment condition or comparison site overall was highly correlated with the amount of interest-based negotiation training respondents reported ($r = .580, p<.000$), and a t-test comparing the amount of training in the two groups was significant ($t = 14.354$). Similarly, within each pair the amount of negotiation training was highly correlated with being in the treatment site (pair 1: $r = .574, p<.000$; pair 2: $r = .631, p<.000$). T-tests comparing the amount of negotiation training with each pair confirmed the differences (pair 1: $t = 10.857$; pair 2: $t = 10.753$). I also asked whether or not a dispute resolution advisor (i.e. interest-based neutral) was involved in the reported conflict. This is not a perfect test of exposure to interest-based neutrals since they are not involved in every conflict in their office, but it serves as a manipulation check since only those employees in the DRS treatment site should have responded affirmatively to this question. Indeed, in pair two, using a dispute resolution advisor was significantly correlated to being in the DRS treatment site ($r = .296, p<.000$) and the t-test was also significant ($t = 9.192$). I compared responses to this question in the two treatment sites as well to see if there was a
difference between them, and found both high correlation and significant t-test results ($r = .362$, $p < .000; t = 14.000$). These analyses support the hypothesis that the manipulations were effective, in that respondents from the dispute resolution treatment sites had more training in interest-based negotiations than did those in the comparison sites, and that respondents from the DRS treatment site had more exposure to an interest-based neutral than did respondents from any of the other sites.

---------------------
Insert Table Seven here
---------------------

Analyses

Ordinary least squares regression (OLS) analyses and logit analyses were performed according to the continuous or dichotomous nature of the dependent variable. In all models, I used robust standard errors that corrected for biases generated by the clustering of observations in groups (Moulton 1990). The equations estimated are $Y = \text{treatment} + \text{pair} + \text{treatment*pair} + \text{manager} + \text{age} + \text{relationship conflict} + \text{task conflict}$. Treatment is a dummy variable that equals one for observations in the treatment sites and zero for observations from the comparison sites. Pair is a dummy variable indicating which pair the observation is in, and is not of substantive interest. Treatment*pair is an interaction term that indicates whether or not the effect of being a treatment site in Pair Two (i.e. the DRS Treatment Site) is significantly different from being the treatment site in Pair One (i.e. the Negotiation site). The specific effect of the Negotiation relative to Comparison One is simply the Treatment coefficient, while the effect of the DRS relative to Comparison Two is derived by adding the coefficients from Treatment and Treatment*pair. Manager, age, relationship and task conflict are control variable. Since the
standard error for the effect of the DRS Treatment relative to Comparison Two cannot be derived
directly from this one equation, I ran the same equation a second time on data from just that pair
to test the significance of that specific relationship (reported in the “DRS v. Comp. 2” row of
Table Nine). See Table Eight for descriptive statistics, and Table Nine for a summary of the
quantitative results.

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Insert Tables Eight and Nine here

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Attitudes (H 1a and 1b)

The results of analyzing the effects of the interventions on conflict attitudes are mixed. A
number of comments were made during interviews with employees in the treatment sites that
indicated a change in attitudes resulting directly from the interventions. For example, a
respondent from the Negotiation site said:

It's not an easy thing for me to talk to someone, but I'm more confident and management
has said it's ok to talk about it and that makes it ok. Management has made it legitimate
and appropriate to deal directly with conflict. In the past I would be more inclined to deal
with something myself, whereas now I say maybe it's not all my problem and I'd better
talk to the person to work it out.

This quote demonstrates the effect of the treatment on personal confidence for addressing
conflicts directly. It also mentions management making it more legitimate and appropriate to
deal with conflict directly. While this suggests that for some people the interventions affected
attitudes exactly as it was expected to, the quantitative data indicate that exposure to the
Negotiation had no significant effect on attitudes ($\beta = -0.054 (0.074)$). The data do suggest that the
DRS had a significantly more positive effect on conflict attitudes than did the Negotiation ($\beta =
0.555 (0.009)^{**}$), and that the affect of the DRS relative to Comparison Two was positive and
significant ($\beta = .501(0.080^{***})$). This pattern of results supports hypothesis 1b that there is a curvilinear relationship, and does not support hypothesis 1a that the relationship is linear.

Avoidance (H2a & H2b)

Conflict avoidance was widespread in this organization. It seemed to be the general approach to conflict in both comparison sites, and the biggest challenge to overcome for employees in the treatment sites. For example, a very high-ranking member of Comparison Two told me the following story:

I think the courageous thing to do would be to talk to him about how his behavior is making it impossible to do my job, and that I’m worried about him. But I’m afraid. What am I afraid of? He's not going to yell at me, he can't hurt me, but I'm afraid to approach him about this.

This illustrates how conflict avoidance was reported to me, and exemplifies how people wrestled with the temptation to avoid conflicts even when they know it is not appropriate. Two different examples from DRS Treatment Site interviewees demonstrate their effort to change their avoidant tendencies:

One change for me personally is that I will proactively face a conflict head on in my area whereas I used to avoid it. My communication style has changed with respect to contentious issues. I vent, but then I come back constructively.

It has helped a lot with my communication. I had a difficult time approaching people in the past, and the course really helped me deal with my own staff. I review my notes often and approach people so they don't get defensive using lots of “I” statements. It’s a different approach, and it works well.

Rather than decrease avoidance, however, the quantitative data indicate that exposure to the Negotiation actually increased avoidance behavior ($\beta = .197 (0.051^*)$) relative to Comparison One. On the other hand, exposure to the DRS reduced avoidance more than did exposure to the
Negotiation ($\beta = -1.493 \text{ (.037)}^{***}$). The net effect of the DRS Treatment Site relative to Comparison Two was also significantly negative ($\beta = -1.296 \text{ (.070)}^{***}$). Once again, the data support hypothesis 2b over hypothesis 2a, in that there appears to be a curvilinear relationship between the interventions and conflict avoidance.

Negotiation (H3a & H3b)

Increasing direct negotiation among disputants was the primary objective of both dispute resolution interventions, and many interviewees reported examples of negotiation behavior. For example, a respondent from the Negotiation site said:

I finally had a one on one with her and said, look, this is really hurting my back because I assign the files [and have to reach over the cart]. Why don't you do the assignment tomorrow to see how you deal with the carts? She said she'd try it, and sure enough, the carts were never there again.

The quantitative data support the impact of both interventions on negotiation activity. There was a significant increase in negotiation activity from exposure to the Negotiation ($\beta = .402 \text{ (.064)}^{***}$). This effect was even greater in the DRS Treatment Site ($\beta = .515 \text{ (.019)}^{***}$), and the net effect of the DRS Treatment Site relative to Comparison Two was significantly positive ($\beta = .917 \text{ (.066)}^{***}$). Unlike the other two variables already discussed, this pattern is consistent with a linear relationship rather than a curvilinear one between the interventions and negotiation behavior. Therefore, hypothesis 3a is supported, and 3b is not.

Resolution (H4a & H4b)

My interviewees gave some examples of resolved conflicts, and some examples of conflicts that were not resolved. An example of a resolution was:
After more than two hours of talking, I got into a career opportunity system...[And] the team leader put in a good word for me with someone she knows at [a different government agency]. The next day I was called to work in town.

The quantitative data indicate that the likelihood of resolution was actually lower in the Negotiation site relative to Comparison One, however ($\beta = -.284 (0.075)^{***}$). The effect was significantly greater in the DRS Treatment than in the IBN Treatment site ($\beta = 1.507 (0.028)^{***}$), and the net effect of the DRS Treatment relative to Comparison Two was positive and significant ($\beta = 1.223 (0.095)^{***}$). Once again, the pattern of results supports the curvilinear hypothesis (4b) but not the linear one (4a).

DISCUSSION

I set up this analysis by presenting two sets of competing hypotheses to determine whether the benefits of introducing a DRS over an individual or pair of components were due to the broader menu of components being available for more types of workplace conflicts or to complementarities among DRS components. In both sets of hypotheses, I suggested that that the DRS Treatment effects would be stronger than the Negotiation effects. However, in Hypotheses 1a-4a, a linear relationship between the number of components in an intervention and the strength of the outcomes was proposed. In Hypotheses 1b-4b, I proposed a curvilinear relationship, such that non-significant effects were expected from the Negotiation intervention, but significantly beneficial effects from the DRS Treatment.

I found that not only were the effects much stronger from the DRS treatment, but also that the Negotiation treatment had some detrimental impacts. Specifically, in the DRS Treatment site, there were more positive attitudes towards conflict, less conflict avoidance, more negotiation, and a greater likelihood of resolution compared to Comparison Two and the difference between the Negotiation Site and Comparison One. By contrast, while the negotiation
behavior was somewhat more prevalent in the Negotiation site than in Comparison one, there was also no effect on attitudes, more avoidance, and less resolution. These findings support the curvilinear hypotheses, and therefore a complementarities mechanism more strongly than the linear ones.

The results imply that the power of a dispute resolution intervention may not be the specific skills training, but the reinforcement of those skills through complementary components. In this case, the key difference between the treatment sites was the existence of an interest-based neutral, who acted as a support resource and a champion for the new processes. In the DRS Treatment Site, organizational members identified the interest-based neutral as a resource that they could turn to for help when they wanted to experiment with their new skills. For example:

The [neutral] is the person who is the first contact most employees would have... A fair number of people come to [the neutral] to say "here's what I'm going to do, is this the way the process works?" Sometimes it's literally coaching, sometimes setting up meetings, sometimes they are just talking about the process.

She was both practically and symbolically important because she was a constant reminder to use the new skills and provided security for people to try. Because her services were confidential, she provided a forum in which individuals with conflicts could get support, without it reflecting poorly to their supervisors.

It helps to go to [the neutral] if there are particular problems. That way my supervisor can evaluate my performance without these other things affecting her interpretation.

Thus, the interest-based neutral played an important role in the DRS by reinforcing the training and providing security against potential retribution or other negative consequences to implementing the new skills.
In contrast, there was no such symbolic conflict resource in the Negotiation site. Once people were trained, they did not have any support to try out and get coaching on how to apply their new skills to real situations. The leader of the site relied on every manager to model and champion the new skills, but since they were newly trained themselves, they could hardly act as support resources for their subordinates.

A big thing that is missing from the implementation is some kind of dispute resolution facilitator. There's no on-going presence... No advertisement that there are neutral third parties available... We gave everyone the training, but where do they go when they have a conflict? ... There's not enough support for staff out there who are saying, 'gee, I'd like to use these conflict management techniques, but how do I go about it’

Thus, while the training was perceived quite positively, employees in the Negotiation site found it difficult to implement the new skills, and the training was not reinforced.

The qualitative data suggest a few potential mechanisms underlying DRS success. This lack of reinforcement may have caused some organizational members to question the organization’s commitment to the new conflict management processes. Without demonstrating such a commitment, the workforce may have interpreted the training as the latest management fad or “flavor of the month”. Exposure to too many of these kinds of interventions could certainly lead to frustration and discouragement leading to negative reactions.

Another possible mechanism is the extent to which a system mitigates the risks from workplace conflicts that individuals incur. Numerous people I interviewed referred to the union grievance system as something they may never use, but that made them comfortable knowing it was there “in case there’s a serious problem.” Similarly, respondents referred to the interest-based neutral as someone they could go to for help with a conflict without risking negative career consequences that could result from a supervisor interpreting such requests as indicative of someone being a troublemaker. Without the reinforcement of alternative types of components,
the negotiation training itself may have put people in a catch-22, where they felt accountable to managing their own conflict, but were not comfortable using direct negotiation techniques to do so effectively. The training may have helped to surface more difficult conflicts, but left employees with little help in resolving them. This created a situation that was worse than the one that existed prior to the training intervention, at least within the time frame I studied.

While these data are consistent with a complementarities story, they are not conclusive. There are a number of questions I cannot answer with this particular site. First, I do not know if the curvilinear effects would be the same were the baseline no explicit dispute resolution components instead of a rights-based component. It is possible that the implementation of a single component would be a significant improvement over nothing. Thus, I do not know if the downturn is immediate, or happens with implementing the second component. Second, since I did not sample from a broader universe of dispute resolution options, I cannot say that this particular combination of components is the most effective, or if any combination of three components versus two would have the same effects. Finally, I cannot say if different combinations of partial bundles would have the same negative effects. For example, since I do not have a case in which the rights-based component is missing, it is possible that the Negotiation with an interest-based neutral would be sufficient to realize the positive effects I observed in the DRS intervention. While other cases in the literature suggest the need for rights-based components to complement less formal interest-based ones (Rubinstein & Kochan 2001), this particular site provides no evidence on this question.

In the next chapter, I will present evidence from two longitudinal studies of Negotiation interventions that answer the bundling questions to some extent. In one case, the Negotiation was introduced by itself and is compared relative to nothing. In the other case, the Negotiation was
introduced with a rights-based component, and is compared to a rights-based component alone. I find non-significant effects in both cases, however, further supporting the complementarities model.
### Table 1: Demographic Comparisons of the Negotiation Site and Comparison One

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Distribution of occupational groups</th>
<th>% Term (non-permanent staff)</th>
<th>% Acting positions</th>
<th>Average Age</th>
<th>% Female</th>
<th>Average Tenure</th>
<th>Union Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiation Site</td>
<td>144</td>
<td>70% Clerks 30% Program Administration</td>
<td>44</td>
<td>27</td>
<td>32</td>
<td>72</td>
<td>5.5</td>
<td>U-2 (100%)</td>
</tr>
<tr>
<td>Comparison One</td>
<td>191 (125 on day shift)</td>
<td>73% Clerks 27% Program Administration</td>
<td>68</td>
<td>19</td>
<td>35</td>
<td>72</td>
<td>4.5 yrs</td>
<td>U-2 (100%)</td>
</tr>
<tr>
<td>Population</td>
<td>Distribution of occupational groups</td>
<td>% Term (non-permanent staff)</td>
<td>% Acting positions</td>
<td>Average Age</td>
<td>% Female</td>
<td>Average Tenure</td>
<td>Union representation</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------</td>
<td>-----------------------------</td>
<td>-------------------</td>
<td>-------------</td>
<td>---------</td>
<td>----------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>DRS Treatment Site</td>
<td>106 Professionals 13% Clerks 76% Program Administration 4% Other</td>
<td>24</td>
<td>6</td>
<td>42</td>
<td>48</td>
<td>10.91</td>
<td>U-1 (80%), U-2 (3%), and PU (17%)</td>
<td></td>
</tr>
<tr>
<td>Comparison Two</td>
<td>106 19% Professionals 18% Clerks 60% Program Administration 3% Other</td>
<td>3</td>
<td>30</td>
<td>43</td>
<td>60</td>
<td>10</td>
<td>U-1 (33%), U-2 (33%), and PU (33%)</td>
<td></td>
</tr>
</tbody>
</table>
Table 3: Correlations between closed-ended and coded open-ended responses

- Task conflict (0.3536***)
- Relationship conflict (0.3445***)
- Conflict avoidance (0.3068***)
- Conflict negotiation (0.5777***)
- Resolution (0.7187***)

\(^3\) (*** indicates p < .0001)
Table 4: PSES Responses (Mean (SD)/ % agree)\(^4\)

<table>
<thead>
<tr>
<th>Item Description</th>
<th>CCRA</th>
<th>Atlantic Region</th>
<th>IBN Treatment + Comparisons on One</th>
<th>DRS Treatment Site</th>
<th>Comparisons on Two</th>
<th>F-test comparing DRS Treatment Site and Comparison Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Encouraged to take initiative</td>
<td>2.82</td>
<td>2.69</td>
<td>2.42</td>
<td>2.33 (.93)</td>
<td>2.63 (.85)</td>
<td>F = 1.184</td>
</tr>
<tr>
<td>23. Have a say in decisions</td>
<td>2.94</td>
<td>2.82</td>
<td>2.76</td>
<td>2.38 (.84)</td>
<td>2.63 (.82)</td>
<td>F = .161</td>
</tr>
<tr>
<td>32. Can disagree without fear of reprisal</td>
<td>2.31</td>
<td>2.20</td>
<td>2.07</td>
<td>2.08 (.15)</td>
<td>1.90 (.90)</td>
<td>F = .039</td>
</tr>
<tr>
<td>38. Supervisor treats me with respect</td>
<td>1.78</td>
<td>1.76</td>
<td>1.50 (.79)</td>
<td>1.73 (.130)</td>
<td>1.69 (.88)</td>
<td>F = 2.085</td>
</tr>
<tr>
<td>39. Colleagues treat me with respect</td>
<td>1.72</td>
<td>1.72 (.79)</td>
<td>1.53 (.58)</td>
<td>1.90 (.136)</td>
<td>1.90 (.88)</td>
<td>F = .006</td>
</tr>
<tr>
<td>40. Colleagues operate in an open and honest way</td>
<td>2.00</td>
<td>1.92 (.90)</td>
<td>1.67 (.81)</td>
<td>2.04 (1.32)</td>
<td>2.10 (.96)</td>
<td>F = 1.503</td>
</tr>
<tr>
<td>53. Accept all persons as equal team members</td>
<td>1.75</td>
<td>1.63 (.92)</td>
<td>1.36 (.63)</td>
<td>1.71 (1.30)</td>
<td>1.84 (1.27)</td>
<td>F = .411</td>
</tr>
<tr>
<td>59. I have experienced discrimination at work</td>
<td>1.89</td>
<td>1.84 (.60)</td>
<td>1.90 (.31)</td>
<td>1.83 (.38)</td>
<td>1.73 (.45)</td>
<td>F = 36.257***</td>
</tr>
<tr>
<td>60. I have experienced harassment at work</td>
<td>1.88</td>
<td>1.85 (.64)</td>
<td>1.88 (.33)</td>
<td>1.90 (.31)</td>
<td>1.69 (.47)</td>
<td>F = 35.559***</td>
</tr>
<tr>
<td>94. Management does a good job of sharing information</td>
<td>2.87</td>
<td>2.70 (1.05)</td>
<td>2.39</td>
<td>2.29 (.77)</td>
<td>2.65 (.89)</td>
<td>F = .004</td>
</tr>
</tbody>
</table>

\(^4\) All responses are on a scale of 1 = strongly disagree to 5 = strongly agree.
<table>
<thead>
<tr>
<th></th>
<th>Administered</th>
<th>Returned</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiation Site</td>
<td>106</td>
<td>106 (100%)</td>
<td>60 (56%)</td>
</tr>
<tr>
<td>Comparison One</td>
<td>101</td>
<td>101 (100%)</td>
<td>75 (74%)</td>
</tr>
<tr>
<td>DRS Treatment Site</td>
<td>102</td>
<td>70 (69%)</td>
<td>37 (53%)</td>
</tr>
<tr>
<td>Comparison Two</td>
<td>104</td>
<td>45 (43%)</td>
<td>29 (64%)</td>
</tr>
<tr>
<td>Total</td>
<td>413</td>
<td>322 (78%)</td>
<td>201 (62%)</td>
</tr>
</tbody>
</table>
Table 6: Analyses of non-response bias

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Negotiation</th>
<th>Comparison One</th>
<th>Pair One</th>
<th>DRS Treatment</th>
<th>Comparison Two</th>
<th>Pair Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear</td>
<td>.049 (.098)</td>
<td>-.188 (.199)</td>
<td>.052 (.193)</td>
<td>-.106 (.128)</td>
<td>.375 (.232)</td>
<td>.293 (.264)</td>
<td>.314 (.171)*</td>
</tr>
<tr>
<td>Manage</td>
<td>1.065 (.535)**</td>
<td>1.407 (1.118)</td>
<td>N/A 5</td>
<td>1.596 (1.073)</td>
<td>1.560 (.840)*</td>
<td>.628 (1.317)</td>
<td>1.044 (.684)</td>
</tr>
<tr>
<td>Term</td>
<td>-.023 (.265)</td>
<td>-.747 (.454)</td>
<td>-.792 (.596)</td>
<td>-.358 (.329)</td>
<td>1.312 (.697)*</td>
<td>.854 (1.421)</td>
<td>.829 (.571)</td>
</tr>
<tr>
<td>Tenure</td>
<td>.032 (.029)</td>
<td>.013 (.112)</td>
<td>.069 (.101)</td>
<td>.014 (.068)</td>
<td>.085 (.052)</td>
<td>.026 (.062)</td>
<td>.054 (.039)</td>
</tr>
<tr>
<td>Sex</td>
<td>-.128 (.260)</td>
<td>.231 (.515)</td>
<td>-.808 (.524)</td>
<td>-.128 (.347)</td>
<td>-.024 (.539)</td>
<td>.475 (.737)</td>
<td>.078 (.416)</td>
</tr>
<tr>
<td>Age</td>
<td>-.036 (.017)**</td>
<td>-.051 (.030)*</td>
<td>-.043 (.032)</td>
<td>-.041 (.021)**</td>
<td>-.056 (.049)</td>
<td>.018 (.052)</td>
<td>-.013 (.034)</td>
</tr>
<tr>
<td>Constant</td>
<td>1.553 (.707)**</td>
<td>2.727 (1.503)*</td>
<td>3.086 (1.410)**</td>
<td>2.498 (.950)**</td>
<td>.208 (1.925)</td>
<td>-1.450 (2.133)</td>
<td>-.703 (1.368)</td>
</tr>
</tbody>
</table>

N 322 106 101 207 70 45 115

*p<.10 **p<.05 ***p<.01

5 Manager perfectly predicts the outcome in this site, so the variable was dropped from this analysis.
Table 7: Manipulation Check

<table>
<thead>
<tr>
<th></th>
<th>Negotiation Training</th>
<th>Interest- based Neutral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total n=302</td>
<td>r = .580***, t=14.354</td>
<td>N/A</td>
</tr>
<tr>
<td>Pair one n=197</td>
<td>r = .574***, t= 10.857</td>
<td>N/A</td>
</tr>
<tr>
<td>Pair two n=105</td>
<td>r = .631***, t= 10.753</td>
<td>r = .296***, t = 9.1924</td>
</tr>
<tr>
<td>Negotiation versus DRS site</td>
<td>N/A</td>
<td>r = .362***, t =14.000</td>
</tr>
</tbody>
</table>

***p<.01
Table 8: Descriptive Statistics
Continuous Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
<td>201</td>
<td>3.183</td>
<td>1.023</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Avoidance</td>
<td>199</td>
<td>2.653</td>
<td>1.827</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Negotiation</td>
<td>201</td>
<td>3.134</td>
<td>1.790</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Age</td>
<td>201</td>
<td>37.507</td>
<td>7.533</td>
<td>22</td>
<td>58</td>
</tr>
<tr>
<td>Tenure</td>
<td>201</td>
<td>6.467</td>
<td>5.341</td>
<td>1</td>
<td>31</td>
</tr>
<tr>
<td>Relationship Conflict</td>
<td>198</td>
<td>2.376</td>
<td>1.396</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Task Conflict</td>
<td>198</td>
<td>3.389</td>
<td>1.462</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

Dichotomous Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolved Conflicts</td>
<td>201</td>
<td>83 Resolved</td>
</tr>
<tr>
<td>Managers</td>
<td>201</td>
<td>22 Managers</td>
</tr>
<tr>
<td>Sex</td>
<td>201</td>
<td>141 Female</td>
</tr>
<tr>
<td>Temporary Contract</td>
<td>201</td>
<td>76 Long-term Temporary</td>
</tr>
<tr>
<td>Employees</td>
<td>201</td>
<td>Contracts</td>
</tr>
</tbody>
</table>
Table 8 continued: Correlations

<table>
<thead>
<tr>
<th></th>
<th>Attitude</th>
<th>Avoid</th>
<th>Negotiate</th>
<th>Resolution</th>
<th>Age</th>
<th>Manager</th>
<th>Sex</th>
<th>Tenure</th>
<th>Term</th>
<th>Relation</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoid</td>
<td>-0.439***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negotiate</td>
<td>0.431***</td>
<td>-0.724***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resolve</td>
<td>0.555***</td>
<td>-0.300***</td>
<td>0.248***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-0.038</td>
<td>0.057</td>
<td>-0.093</td>
<td>0.046</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>0.166**</td>
<td>-0.135*</td>
<td>0.152**</td>
<td>0.094</td>
<td>0.129*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>0.092</td>
<td>-0.057</td>
<td>0.151**</td>
<td>0.004</td>
<td>-0.006</td>
<td>0.189***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure</td>
<td>0.096</td>
<td>-0.008</td>
<td>-0.024</td>
<td>0.097</td>
<td>0.455***</td>
<td>0.268***</td>
<td>0.106</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term</td>
<td>-0.001</td>
<td>0.079</td>
<td>-0.139**</td>
<td>0.096</td>
<td>-0.159**</td>
<td>-0.241***</td>
<td>-0.194***</td>
<td>-0.038***</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relation</td>
<td>-0.032</td>
<td>0.093</td>
<td>-0.062</td>
<td>-0.121*</td>
<td>-0.052</td>
<td>-0.063</td>
<td>0.101</td>
<td>0.040</td>
<td>-0.097</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Task</td>
<td>0.048</td>
<td>-0.041</td>
<td>0.006</td>
<td>0.042</td>
<td>-0.038</td>
<td>-0.018</td>
<td>-0.063</td>
<td>0.054</td>
<td>-0.028</td>
<td>-0.341***</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*p<.10 **p<.05 ***p<.01
Table 9: Quantitative Results

<table>
<thead>
<tr>
<th></th>
<th>Attitudes</th>
<th>Avoidance</th>
<th>Negotiation</th>
<th>Resolution (Logit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.125 (.513)**</td>
<td>1.773 (.967)</td>
<td>3.944 (.846)**</td>
<td>-693 (.519)</td>
</tr>
<tr>
<td>Treatment (IBM)</td>
<td>-.054 (.074)</td>
<td>.197 (.051)**</td>
<td>.402 (.064)**</td>
<td>-.284 (.075)***</td>
</tr>
<tr>
<td>Pair</td>
<td>-.465 (.070)***</td>
<td>.574 (.162)**</td>
<td>-.001 (.149)</td>
<td>-1.217 (.018)***</td>
</tr>
<tr>
<td>Treatment*Pair</td>
<td>.555 (.009)***</td>
<td>-1.493 (.037)***</td>
<td>.515 (.019)***</td>
<td>1.507 (.028)***</td>
</tr>
<tr>
<td>Age</td>
<td>-.003 (.011)</td>
<td>.020 (.026)</td>
<td>-.029 (.022)</td>
<td>.019 (.004)***</td>
</tr>
<tr>
<td>Manager</td>
<td>.544 (.287)</td>
<td>-.633 (.343)</td>
<td>.705 (.443)</td>
<td>.453 (.440)</td>
</tr>
<tr>
<td>Relationship Conflict</td>
<td>.011 (.059)</td>
<td>.117 (.030)**</td>
<td>-.052 (.048)</td>
<td>-.146 (.054)***</td>
</tr>
<tr>
<td>Task Conflict</td>
<td>.044 (.051)</td>
<td>-.022 (.082)</td>
<td>.005 (.128)</td>
<td>.032 (.085)</td>
</tr>
<tr>
<td>$R^2$/log-likelihood (n)</td>
<td>.06 (198)</td>
<td>.08 (196)</td>
<td>.07 (198)</td>
<td>-128.665 (198) (log-likelihood)</td>
</tr>
<tr>
<td>DRS v. Comp. 2</td>
<td>.501 (.080)**</td>
<td>-1.296 (.070)***</td>
<td>.917 (.066)***</td>
<td>1.223 (.095)***</td>
</tr>
</tbody>
</table>

* p<.10  **p<.05  ***p<.01
Figure 1: Data Collection Timeline

- June '99: Pilot dispute resolution intervention
- June '00: Internal evaluation
- Jan '01: Initial Survey
- Oct '01: Second round of interviews and surveys
- March '99: Public Sector Employee Survey
- Oct '99: Environmental Scans
- Oct '00-Feb '01: Initial interviews
- June '01: National dispute resolution intervention
CHAPTER FIVE: SUPPLEMENTAL STUDIES

The data from the quasi-experiment are consistent with a complementarities explanation for the benefits of dispute resolution systems over individual components. They leave many open questions, however, including whether or not the effects would be the same if the components were implemented in different sequences and combinations. The results may be different if the baseline were zero components. In other words, it is possible that there is a positive jump from zero to one component, and the flat to deleterious effects occur only between one and two components. Additionally, since the previous analyses were conducted in a single Canadian government agency, it is possible that they would not generalize to other settings. Finally, since the quasi-experimental data were collected cross-sectionally, I cannot be entirely sure of the pre-existing similarities across the sites without longitudinal data.

In this chapter, I try to address these limitations by presenting additional data from two supplemental longitudinal studies. Both studies have their limitations, and are neither directly comparable with one another nor with the quasi-experiment. Nonetheless, they do allow me to replicate the findings to some extent in two different organizational settings, with different combinations of components, and with different baselines. These data are not presented to stand on their own, but to supplement the quasi-experiment that is the core empirical analysis of this dissertation.

The first supplemental study is conducted in the same Canadian agency as was the setting for the quasi-experiment. I returned to what had been the two comparison sites six months after they received an abridged version of the Negotiation that had been implemented during the pilot phase of their dispute resolution project. Unfortunately, the training intervention itself was not identical to the one they had implemented during the pilot phase. Instead of three-days, it was a
one-day workshop designed to heighten employees’ awareness of interest-based approaches to managing workplace conflict. Since I have before-and-after data from these sites, however, I can see if the effects of the Negotiation I found in the quasi-experiment are replicable with a substantively different intervention instrument. Once again, it is a test of the effects of two components relative to a baseline rights-based grievance procedure.

The second supplemental data come from a previous study I conducted in an American private-sector manufacturing plant in 1999. While the setting is completely different, coincidentally, they implemented a very similar one-day negotiation-training workshop to their front-line employees. I have nearly identical before-and-after data from this site as from the second Agency study. Thus, I present it as an example of the effect of Negotiation relative to a zero-component baseline.

In neither case are the effects significant. While the investment in these interventions was considerably lower than had been the case in the Agency pilot project, and that may be driving the non-effects, the two one-day interventions were rated as fairly typical of organizational negotiation training interventions by a panel of expert organizational negotiation trainers. Thus, while I acknowledge their limitations up front, I believe these two studies further bolster the claim that Negotiation as an intervention does not by itself significantly change individuals’ conflict behaviors, whether it is the only conflict management option, or offered in conjunction with a rights-based procedure. It does not have a positive effect in settings as diverse as a Canadian government agency and an American private sector manufacturing plant. Only in the case of the three-component dispute resolution system that was presented in the quasi-experimental chapter do we see positive effects from organizational conflict interventions.
SUPPLEMENTAL STUDY ONE

Setting

The Canadian government Agency began experimenting with a new dispute resolution system (DRS) in June 1999 with twelve pilot sites across the country. In April 2000, it rolled-out an abridged version of the new DRS nation-wide. Instead of three days of training for all employees plus an additional three-days for managers, team leaders, union leaders, and other DRS access points as in the pilot project, the national implementation included only a one-day conflict awareness session for all 45,000 employees. The access points still got an additional three-day training session. Much of the responsibility for implementing and paying for this new national DRS was regionalized, so that there was more flexibility and less consistency across the country. All workshop facilitators received the same training from the Office of Dispute Management, however, so that the workshops themselves were quite standardized.

I returned to the two comparison sites from the original quasi-experiment six months after the negotiation training intervention to collect a second round of data from the same groups of people (although I could not collect data from the same individual respondents due to the anonymity requirements of the survey instrument).

Training Intervention

The main part of the rollout was the one-day “Demystifying Conflict in the Workplace” awareness training that was administered to all Agency employees. It is substantively different than the three-day skill training that was implemented in the pilot sites, in that it is designed to develop awareness of interest-based conflict management within the Agency rather than build interest-based skills among participants. The idea is that the awareness training would pique the interest of some employees, who would be supported in their efforts to expand their negotiation
and conflict management training independently. When the awareness training is reinforced by performance competencies and supervisor reinforcement of interest-based conflict management techniques, its practice should disseminate throughout the Agency.

The Demystifying Conflicts in our Workplace was designed to "ensure that participants understand the theory behind interest-based approaches to handling work-related disputes." It was explicitly not designed as a skills-building exercise. The first part of the workshop familiarized participants with the Agency's new dispute resolution policy. The next phase introduced different types of conflicts and conflict-handling styles. Participants took a version of the Thomas-Kilmann conflict questionnaire to identify their own conflict handling preferences (i.e. competitive, collaborative, compromising, avoiding or accommodating). The last phase of the workshop introduced interest-based negotiations, drawn primarily from Fisher and Ury's (1981) "Getting to Yes" book. Participants did not role-play conflicts, but did discuss their workplace experiences and cases presented in the materials.

Comparison One. The Comparison One group administered its one-day training to all employees in January 2001. They formed an advisory board, with representatives from management, unions, and dispute resolution facilitators and built a dispute resolution system site on their intranet. The training was kicked off with an e-mail from the site director, promotional items with the "Let's Talk" logo, and a communication packet each employee received at the training. The evaluations of the workshops were largely positive, although some respondents wanted additional follow-up.

Despite the considerable attention given to the training process at its outset, there had been no formal follow-up as of October 2001, when these data were collected. The Comparison One site opted not to invest in a local DRA for philosophical reasons. The steering committee
believes that a DRA would hinder the dissemination of responsibility throughout the organization because people would use it as a crutch. Instead of a single DRA, the site charged each access point with acting like a DRA, and formalized this responsibility in their Management Charter. Thus, there is no one visible champion present on site.

Comparison Two. The Comparison Two site completed its one-day training in February 2001. The local planning committee included representatives from management, unions, and interested employees. A project leader was identified, and acted as project champion throughout the training process. Shortly after its completion, however, she transferred to a different Agency facility, and her replacement was not named until late September. While the intentions of the Comparison Two site rollout included a visible local champion like a DRA, this was not practiced for most of the time frame of this study. The treatment, therefore, was very similar to what was implemented in the Comparison One site, but the absence of a local champion was for logistical, rather than philosophical reasons.

The original project lead conducted a preliminary evaluation and determined that the initial communication strategies employed by the Comparison Two site had generated awareness of the dispute resolution system. People I interviewed also reported their attitudes and awareness of conflict had changed as a result of the workshops. Significantly, the management committee and union presidents (8 people in all) participated in an on-site mediation in April 2001. All participants were pleased with the process, and their experience with mediation could increase their commitment to the DRS. However, I was unable to observe any broader consequences of this experience at the time of my data collection.

Furthermore, the recommendations of the original project lead to follow-up through various communication media were not acted upon until a new project lead was identified nearly
four months later. Similarly to the Comparison One rollout, therefore, the attention that accompanied administering the Demystifying Conflict workshop rapidly waned. Except for the recently appointed new project lead, Comparison Two employees did not recognize access points as new conflict resources. “The resources available to people for resolving conflicts now are no different than they have been all along.”

Design

A longitudinal before-and-after research design was employed. Data from 179 surveys (a 45% response rate) and 58 hour-long interviews with employees, team leaders, managers, union representatives and site directors were collected prior to the workshop administrations and again six months after their completion. Data from the two sites were combined for analyses because the workshops were the same in both sites, and the number of responses from each site was too low to facilitate independent statistical analyses. I will focus on the survey data.

Methods

I used the same survey instrument as in the quasi-experiment, and measured the variables in the same way (Appendix B). Once again, blind raters coded the narrative conflict accounts collected in the second round of data collection and achieved a high-level of inter-rater reliability (Cohen’s Kappa .733***). I did not compare the linear and curvilinear hypotheses, but I tested the same basic relationships as in the quasi-experiment. In other words, I tested the hypotheses that exposure to the Demystifying Conflicts one-day workshop would: 1) reduce conflict avoidance; 2) increase conflict negotiation; and 3) increase resolution. I did not test the attitudinal dependent variable or control for the same demographic characteristics as in the quasi-
experimental analyses because I do not have equivalent measures in the second supplemental study.\textsuperscript{6} I included relationship and task conflict issues as control variables in the equations. I re-ran the equations with the demographic controls and on the attitudinal dependent variable and tested whether the results changed if I included a site dummy variable. None of these iterations changed the results.

I conducted robust OLS regressions on avoidance and negotiation, and robust logit analyses on the resolution variable. The equation is $Y = \text{Training} + \text{Relationship Conflict} + \text{Task Conflict}$. The "Training" variable was a dummy variable coded 0 for the first survey and 1 for the second survey data. Thus, it simply indicates whether or not respondents participated in the training workshop. Once again, the bias in standard errors from data clustering is corrected with Huber/White robust standard error estimates.

Results

None of the hypotheses were supported by this analysis (see Table One). There was a non-significant reduction in avoidance (-.121 (.271)), and non-significant increases in negotiation (.307 (.270)) and resolution (.062 (.075)). The trends were all in the expected direction, however, so it is possible that with a larger sample or a more extensive training intervention there would have been less ambiguous results.

\begin{center}
| Insert Table One here |
\end{center}

Summary

\textsuperscript{6} The second supplemental study was actually conducted two years prior to the first one, and I developed the survey instrument somewhat between the two studies.
This one-day conflict intervention that the Agency thought would have some impact on employees' conflict behaviors did not result in any measurable changes six months later. While the lack of significant findings could be due to the moderate scale of the training or the relatively short period of time after the training when the data were collected, it is also consistent with findings from the quasi-experimental study reported in the previous chapter. Neither the one-day nor the three-day training intervention had a measurable impact on conflict behaviors relative to a baseline grievance procedure. The results are consistent with a curvilinear relationship characteristic of complementarities among interacting components.

SUPPLEMENTAL STUDY II

Setting

The second supplemental study tests the impact of a similar one-day negotiation training intervention compared to no explicit conflict resolution procedures. It was done in a private sector non-unionized American manufacturing plant in 1999 one year after the plant had been acquired. The new owners stressed the importance of open discussion of conflicts for decision-making and productivity, and they offered courses to their new employees for how to do so. Until the training intervention, the manufacturing employees had no prior exposure to interest-based negotiation, and had no access to rights-based processes or neutral service providers. Conflicts were generally avoided or escalated to supervisors to deal with. Under their new performance criteria, however, the acquired employees recognized that they were being held accountable to new conflict expectations that were markedly different than their previous experience. Thus, they requested specific conflict resolution training from their supervisors.

Training Intervention

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The organizational development specialist on site designed a three-part activity to guide the manufacturing teams of 7-35 people each through a process of developing norms and expectations for conflict resolution that were codified in team-level agreements. The goal of the training was to “collectively share and discuss our assumptions and expectations as they relate to resolving conflict within the team and negotiate an explicit agreement as to how your team will resolve conflicts in the future.” Thus, this intervention was also intended to be more of an awareness development, rather than a skill-building workshop.

The first stage was an articulation of the company’s conflict resolution policy and an introduction to interest-based negotiation processes. The second stage involved brainstorming conflict experiences group members had that were or were not handled well. The third was brainstorming how group members wanted conflicts to be resolved, which was summarized in group-level conflict resolution agreements. The intent of this intervention was, therefore, to guide the workgroups through a process of developing their own norms and conflict management processes that were informed by the company values.

All the groups developed a process that was essentially the same: direct negotiation followed by elevation to a third party in the workgroup for informal mediation, and to the supervisor as a last resort. For example:

STEP 1: Ensure that the parties involved in the conflict have a clear understanding of what the conflict is.

STEP 2: One-on-One meeting between parties involved in conflict.

PROCESS FOR MEETING:

Set Guidelines: Both parties need to commit to resolving the conflict, speak to each other in a professional manner, and let each person finish his or her thought.
Define the problem and why it exists.

Generate possible solutions or alternatives and identify what things will look like in the future.

Identify a solution (reach agreement).

Determine how to implement the agreed upon solution.

STEP 3: Third party mediation by another team member or supervisor.

Thus, the conflict resolution intervention was clearly intended to change individuals’ conflict behaviors so they dealt with conflict more directly and using interest-based approaches.

Design and Methods

The design of this study was identical to the one used for the Agency study. Surveys were collected from team members before the intervention and again five months later. A total of 154 were returned, representing a 60% response rate. The survey instrument was very similar to the one used in the Agency study, in that it asked respondents to describe one conflict they had in detail (see Appendix E for survey instrument). Blind raters subsequently coded these narrative accounts, with an inter-rater reliability Kappa value of 0.744***.

The same analyses were conducted with these data as with the Agency data. Robust OLS and logit analyses were done on the same dependent variables: avoidance, negotiation and resolution. Relationship and task conflict issues were included as controls (see Appendix F for a list of the items used).

Results
The one-day training intervention in this manufacturing plant had no significant effects on conflict behaviors. As in the Agency results, all the relationships were in the predicted direction, but none at the $\alpha = .05$ level (see Table Two). The trend was for conflicts to be avoided less ($-.298 (.244)$), negotiated more ($+.415 (.269)$) and resolved more ($+.118 (.133)$), but we cannot reject the null hypothesis that there is no effect of the intervention.

Insert Table Two here

Summary

Even though this negotiation training intervention took place in a completely different setting than the previous studies, the content and effects of the training were remarkably similar. The similarly non-significant effects suggest that training alone does not improve conflict behaviors relative to no explicit conflict management options for employees. I cannot, of course, conclude that the results would be different if a full DRS were implemented in this site, nor can I generalize this finding beyond negotiation training interventions. I merely present these results to supplement the other study.

DISCUSSION

The consistency with which I have documented non-significant, and even deleterious effects of Negotiation by itself in organizations is striking. The relationship persists in the face of qualitatively different interventions, different baselines, and different settings. While it is possible that the non-effects in these two supplemental before-and-after studies could be due to the relatively low investment the organizations made in the training intervention itself, these kinds of one-day training interventions are extremely typical in American and Canadian organizations. At a minimum, the results call into question the common organizational
development practice of providing short-term training as a means to change employee’s behavior in a meaningful way. At best, they provide additional support for the complementarities theoretical explanation for DRS effectiveness.
Table One: Agency Results

<table>
<thead>
<tr>
<th></th>
<th>Avoidance</th>
<th>Negotiation</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.917 (.417)***</td>
<td>2.450 (.415)***</td>
<td>.376 (.114)***</td>
</tr>
<tr>
<td>Training</td>
<td>-.121 (.271)</td>
<td>.307 (.270)</td>
<td>.062 (.075)</td>
</tr>
<tr>
<td>Relationship issue</td>
<td>.247 (.194)</td>
<td>.023 (.193)</td>
<td>-.093 (.053)*</td>
</tr>
<tr>
<td>Task issue</td>
<td>-.197 (.200)</td>
<td>.117 (.199)</td>
<td>-.039 (.055)</td>
</tr>
<tr>
<td>R² (N)</td>
<td>.02 (188)</td>
<td>.01 (188)</td>
<td>.02 (184)</td>
</tr>
</tbody>
</table>
Table Two: Manufacturing Results

<table>
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<tr>
<th></th>
<th>Avoidance</th>
<th>Negotiation</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.227 (.453)***</td>
<td>3.222 (.500)***</td>
<td>1.269 (.245)***</td>
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<td>Training</td>
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<td>.415 (.269)</td>
<td>.118 (.133)</td>
</tr>
<tr>
<td>Relationship issue</td>
<td>.233 (.088)***</td>
<td>-.189 (.097)*</td>
<td>.142 (.048)***</td>
</tr>
<tr>
<td>Task issue</td>
<td>-.049 (.069)</td>
<td>.045 (.077)</td>
<td>.009 (.038)</td>
</tr>
<tr>
<td>R² (N)</td>
<td>.05 (153)</td>
<td>.04 (154)</td>
<td>.07 (150)</td>
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</table>
CHAPTER SIX: CONCLUSION AND CONTRIBUTIONS

In the introduction to this dissertation, I critiqued the existing dispute resolution systems literature as descriptive and anecdotal, "lacking theoretical richness and empirical rigor". In response, I have presented a parsimonious theoretical explanation for the beneficial effects of systems over individual and pairs of components that have been observed in practice (see for example: McCabe 1988; Ewing 1989; Ury, Brett & Goldberg 1989; Costantino & Merchant 1996; Rowe 1997; Slaikeu & Hasson 1998; SPIDR 2001). I presented two models of the relationship between the number of dispute resolution components and their effects on individuals' conflict behaviors. First, the additive model proposed a linear relationship between the number of components and performance due to the broader menu of options available to address more individuals and types of workplace disputes. The second, complementarities model, proposed instead that there is a curvilinear relationship between the number of components and performance due to reinforcing synergies among the components. I presented data from three separate empirical field studies, none of which conclusively supports the complementarities model, but each of which is clearly inconsistent with the additive model. When fewer than three components were implemented, only one outcome out of the ten that were tested (i.e. negotiation in the quasi-experimental study) was significantly affected in the hypothesized direction. Furthermore, greater investment in a single component (such as the number of hours of negotiation training provided) does not appear to improve its effects. On the contrary, in these field settings, the effects of a three-day negotiation training workshop actually appeared deleterious, whereas those of the one-day workshops were in the expected direction, but not statistically significant. Thus, even if the data do not conclusively support a complementarities explanation, they clearly reject an additive one.
The contribution of this dissertation is to suggest that DRSs comprised of multiple, complementary components may generate synergies such that the whole is more effective than the sum of its parts. The key is the interplay among components, such that each one reinforces the others. None of the types of components are able to optimally address those types of conflicts for which they are designed without support from the other two. It is for this reason that partial bundles or individual components are not only less effective, but may actually be ineffective change agents.

The qualitative data suggested several potential mechanisms that might underlie the effectiveness of DRSs. One is that partial bundles may signal a lack of organizational commitment to the new dispute resolution processes. Without significant leadership support, employees may ignore single- or pairs-of-component interventions as the latest management fad that will soon blow over. Another potential mechanism is the mitigation of personal and professional risk for engaging in workplace conflict. A system needs to overcome peoples' fears that trying to resolve a conflict will damage their working and social relationships or earn them a negative label that could hurt their career advancement possibilities. The negotiation training interventions I studied did not effectively reduce these risks. In particular, the lack of neutral conflict advisors forced employees to attempt to resolve conflicts on their own, or with the help of their direct supervisor. Either option was perceived to actually increase the risks of post-conflict ramifications. A third potential mechanism is that a DRS is administratively more efficient than any single or pair of components could be. A DRS allows for the best screening and channeling of disputes into appropriate or desirable components, and this alone may account for the beneficial effects. Future research should certainly explore the underlying mechanisms further.
The findings from this research may also imply that organizational change process more generally require significant reinforcement of any interventions from multiple sources. Indeed, Chris Argyris (1999) identifies many barriers to double-loop learning, or correcting a problem by changing the underlying values of a system, that have to do with a lack of organizational reinforcement. Arrow, McGrath and Berdahl (2000) suggest that groups may initially move to a worse point after a change intervention because of the need to abandon well-practiced routines in order to make changes. Getting them to take the next step to the positive point requires significant support from the organization. In the absence of broader organizational supports, diversity-and sensitivity-training interventions appear to make race relations worse in organizations (Cornelius, Gooch & Todd 2000; Gilbert & Ivancevich 2000). Finally, a summary of decades of evaluating joint union-management quality of work-life (QWL) and other innovative work practices suggests that these participatory programs are only effective when businesses adopt a comprehensive system of complementary innovative practices. Implementing quality circles or work teams alone does not have positive performance effects (Katz, Kochan & Gobille 1983; Macy & Izumi 1993; Wagner 1994; Ichniowski, et al. 1996). Major organizational changes seem to only be effective when they are done as systems so that the desired strategic or behavioral changes are reinforced by multiple incentive and social pressures. Employment dispute resolution scholars could, therefore, look to organizational change theories to develop this field further.

In addition to reinforcement of any intervention by multiple sources, it may need to be reinforced at multiple levels in an organization. Kochan, Katz and McKersie (1986) argue that any transformation of union-management relations requires an organization to make changes at many different levels—from governance structures to line relationships and decision-making
processes—in order for the effects to become institutionalized in a new industrial relations system. Likewise, a number of human resources management and strategic change models focus on the need for congruence across multiple organizational levels, including organizational strategy, decision-making structures, leadership, cultural norms and assumptions, workplace policies, and individuals' skills, in order to implement strategic change initiatives (Baron & Kreps 1999; Beer, Eisenstat & Spector 1990; Beer & Nohria 2000).

This dissertation focused on the internal coherence of a bundle of dispute resolution components. Many interesting questions for future research relate the organizational environment in which DRSs are implemented to see how external fit may also play a key role in determining their success (Huselid 1995; MacDuffie 1995). For instance, I assumed that all three types of dispute resolution components exert equal weights on outcomes. I think a more realistic hypothesis is that different components exert more or less weight in certain organizational contexts. What happens when more examples of each type of component are introduced? Does a more complex system simply amplify the complementarities across types of components, or are there some circumstances in which having multiple interest-based neutral components in an organization would be perfectly adequate? A contingency theory that incorporates the organizational environment is an important future development.

This dissertation also makes a methodological contribution to empirical work on complementarities in organizational interventions and workplace conflict management. Previous research on complementarities in human resources management practices has been criticized for its unspecific construct definition, reliance on cross-sectional, quantitative studies, and over sampling of manufacturing compared to service sectors (Lewin 2001; Godard & Delaney 2000). Furthermore, with few exceptions, the research simply correlates human resources management
practices with firm-level outcomes, leaving the causal mechanisms unclear (Cappelli & Neumark 1999). By studying the behavioral outcomes from implementing DRSs in a government agency, I was able to overcome some of the shortcomings of this earlier work. My construct was clearly defined, I studied a service industry, and I looked at behavioral outcomes where the causal link was relatively unambiguous. The evidence of potential complementarities that I find in these circumstances serves to reinforce the conclusions made by other research in this area.

Furthermore, I utilized a research design that improves on much of the previous research on organizational conflict management because it enabled me to both evaluate the aggregate effects of these systems and understand the qualitative detail of how they worked over time. The dynamics I was interested in are hard to create in a laboratory setting, yet due to the natural quasi-experimental nature of my primary empirical study, I had a clear baseline against which the effects of the different types of dispute resolution interventions could be measured. By supplementing this quasi-experiment with longitudinal data, I was able to validly question the causality of negotiation training on individuals’ attitudes and behaviors that had been more or less assumed in the literature. Since this research was conducted in a unionized setting, I was able to avoid the potentially confounding influence of institutional substitution that could result if an organization implements dispute resolution components to avoid unionization. I can therefore be fairly confident that the effects I observed were due to the dispute resolution components rather than other confounding organizational factors. Additionally, the multiple-methods I employed allowed me to view routine conflict behavior that is notoriously difficult to study but through which many important organizational dynamics proliferate (Kolb & Bartunek 198_).
The research design was far from perfect, however. Ideally, I would have been able to compare the effects of each type of component relative to nothing, each pair of types of components relative to both nothing and to each individual type of components, and a DRS to each pair, individual type of components, and nothing in a highly controlled environment. While I was able to utilize the common aspects of these interventions across my research sites to make clear comparisons, I was not able to examine their effects when implemented in different orders. Nor can I for sure if additional types of dispute resolution components are the only effective organizational reinforcement mechanism. I also do not know if these effects would replicate if different examples of each type of component were introduced, or if it was done in a different organizational setting. Thus, the generalizability of these results may be limited, so the conclusions should be interpreted cautiously.

Nonetheless, this dissertation found some counterintuitive results that challenge the common organizational practice of offering Negotiation programs to employees. I found that in the Negotiation site employees seemed to negotiate more often than when there was just a grievance procedure, but they were resolving conflicts less often. This suggests that the negotiation training they experienced may have helped surface more difficult conflicts that had previously been suppressed. It is possible that employees were dealing with more conflicts on a regular basis, or that the easier conflicts were being successfully resolved quickly through negotiation efforts, so respondents only reported about the tougher conflict they experienced that were harder to resolve. Since I have no measure of the amount of conflict experienced by individuals in the offices, I cannot tell if the overall amount of conflict increased after the interventions. In either case, these data suggest that if negotiation training surfaces those conflicts that are hardest to resolve, without reinforcement by an interest-based neutral and a
rights-based process, a negotiation intervention may make the situation worse. One can understand why an employee’s attitude about conflict would decrease if they were struggling to resolve intractable disputes on their own and not being successful. Perhaps negotiation should be considered a necessary but insufficient part of a dispute resolution change effort.

The practical implications of this are significant. Getting employees to deal with conflicts proactively at work in is difficult. It requires them to risk social and professional retaliation, potentially relinquish control over some resources, and be vulnerable to criticism and disagreement from their peers, supervisors and subordinates. It is also important. Proactive conflict management can surface information that leads to better quality decisions (Amanson, 1996; Jehn, 1995 & 1997) and can help organizations adjust to change (Lewicki, et al 1999; Morrison & Milliken 2000). Beyond reducing the costs of handling conflicts that get filed in external recourse agencies, encouraging proactive conflict management may improve organizational performance and workplace relationships (Baruch Bush & Folger 1996).

This dissertation suggests that organizational leaders who are interested in changing the way conflicts are handled among their employees may be virtually throwing their money away on employee negotiation training workshops or internal mediation offices. Contrary to most practice, this dissertation suggests that the only worthwhile investment an organization can make in conflict management services is to provide multiple, equivalently accessible components to employees *simultaneously* if possible. Interest-based negotiation training needs to be reinforced by coaching and formal justice and recourse mechanisms. Interest-based neutrals need an educated clientele for their actions to broadly affect the workplace, and rights-based alternatives to maintain their credibility and integrity. Rights-based processes need strong case selection-mechanisms to effectively provide workplace justice and security. This is best accomplished
with a workforce that is skilled at resolving many interpersonal and functional disputes
themselves and interest-based neutrals who can advise employees of the most appropriate avenue
for pursuing resolution of a given dispute. Individuals need the viable recourse options provided
by rights-based processes and interest-based neutrals when their negotiation efforts fail.

This is the business case for investment in DRSs rather than individual components or
incremental sequences of components over time. The decision to implement one new conflict
component and “see how it goes” before making a more significant investment could lead to
failure. Practitioners who find scaling pilot DRSs up to the whole organization to be challenging
may be losing the benefits of the complementarities as certain components are de-emphasized for
budgetary reasons. Short of implementing a DRS from the beginning, organizations are unlikely
to see an effect of their investment. Thus, incremental change initiatives could be partially to
blame for the relatively slow diffusion of full DRSs (Lipsky & Seeber 1998). The results of the
dissertation provide some rationale for organizations to invest in full DRSs up front.
REFERENCES


Appendix A: Initial interview protocol with employees

1. Tell me about any conflicts you have had in the past 12 months (since the DRS was introduced).

2. What was the specific cause of the dispute?

3. How was it manifested (or what happened)?

4. What did you do to try and resolve it?

5. Why did you decide to pursue this approach?

6. I will distinguish between the process that you used and the outcome from it. First, What is your impression of the process you used to try and resolve this conflict? Was it effective? Fair?

7. Now, what was the outcome of those efforts? How did the outcome meet your expectation? Was it fair? Are you satisfied with the outcome?

8. Did you have a clear idea of what you wanted to happen when you started?

9. What has happened since? Did it affect how you will approach future conflicts?

10. Do you worry about any bad consequences for this conflict? Did you feel that the process you used protects you from retaliation at all?

11. Would you use the same process again in a future conflict?

12. Was there anything you would have done differently? [If a non-pilot site, skip to q 15].

13. [For people in the pilot sites only] Have you heard about this DRS? What have you heard about it? Have you received any training about it?

14. Did it affect how you approached this dispute? How?

15. Has anyone you know used any interest-based approaches to deal with a conflict? What happened to them?
16. Do you believe that the organization is committed to the DRS? Why or why not?

17. Do you and the people you work with use any group process techniques, such as meeting facilitation, or clear decision-making protocols?

18. Do you or your representatives participate in decision-making on site?

19. Have you experienced any other conflicts in this timeframe?
Appendix B: Agency Survey Instrument

Conflict Survey: Tell me about your conflict experiences.

The objective of this survey is to learn about conflicts that you have experienced at work. Corinne Bendersky, a doctoral candidate at the MIT Sloan School of Management, is conducting the research for her Ph.D. thesis. The data from this study will also be used by the Agency’s Office of Dispute Management to help evaluate the effectiveness of this program.

You will be asked a series of in-depth questions about conflicts you have had at work in the past few months. Conflict is loosely defined as any issue you have disagreed with or felt uncomfortable about. This could include disagreements, misunderstandings, arguments, differences of opinion, views or interests, grievances or any other situation in which there was tension at work. The issue could be interpersonal or task-oriented. The conflict could be with a peer, a supervisor or a subordinate. It does not matter if the conflict never escalated, or was never successfully resolved.

This survey is voluntary. You are not required to participate, and we greatly appreciate participation from those who choose to be involved. If you do not want to answer a particular question, feel free to skip it.

All answers will be kept strictly confidential. At no time will agency representatives see the surveys or any individual responses from them. All data will be presented in aggregate or in such a way as to completely disguise the identity of the respondent. When you have finished, seal your survey in the envelope and hand it in directly to Mrs. Bendersky.
Conflict Questionnaire: Please consider any grievance, disagreement, misunderstanding, argument, difference of opinion, views or interests over tasks or interpersonal relationships to be conflicts for the purposes of this survey.

On a scale of 1 = strongly disagree to 5 = strongly agree, how would you rate the following statements? 0 indicates that the question is not applicable to you.

1. All team members participate in decision-making.
   0 1 2 3 4 5
2. Conflict is dealt with openly in my work unit.
   0 1 2 3 4 5
3. In general, feedback that I provide to my team is listened to.
   0 1 2 3 4 5
4. My immediate supervisor communicates openly with me.
   0 1 2 3 4 5
5. I feel that I can disagree with my immediate supervisor on work-related issues without fear of reprisal or other negative consequences.
   0 1 2 3 4 5
6. In my department, I feel that management does a good job at sharing information.
   0 1 2 3 4 5
7. I receive all necessary job information promptly.
   0 1 2 3 4 5

Organizations strive to have happy people working in the jobs that they are most suited for, who have a clear sense of their career development path, and who get along well because conflicts are resolved directly and quickly by the people involved. Imagine that this description of a “utopian” culture was 10 on a scale of 1 through 10. Where would your office be on that same scale today? Where would it have been on that scale six months ago?

9. Today: 1 2 3 4 5 6 7 8 9 10
10. Six months ago: 1 2 3 4 5 6 7 8 9 10

Please think about any conflicts, disagreements, or problems you have had at work in the last 18 months. On a scale of 1 = strongly disagree to 5 = strongly agree, how would you rate the following statements? 0 indicates that the question is not applicable to you.

11. I have had conflicts at work over staffing or job competitions
    0 1 2 3 4 5
12. I have had conflicts at work over relationship or interpersonal issues
    0 1 2 3 4 5

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13. I have had conflicts at work over job related tasks  
   0 1 2 3 4 5  

14. I have had conflicts at work over feeling cheated by a manager or supervisor's decision or action  
   0 1 2 3 4 5  

15. Describe in detail what happened in the most recent one of these or any other conflicts you have had in the past few months (use the back if you need extra space)  
   ____________________________________________________________  
   ____________________________________________________________  
   ____________________________________________________________  
   ____________________________________________________________  
   ____________________________________________________________  
   ____________________________________________________________  
   ____________________________________________________________  
   ____________________________________________________________  
   ____________________________________________________________  

16. When did this conflict happen (approximate date)? ________________________________  

17. Was this conflict with a peer? __Yes __No  

18. Was this conflict with a supervisor or manager? __Yes __No  

19. Was this conflict with a subordinate? __Yes __No  

On a scale of 1 = strongly disagree to 5 = strongly agree, how would you rate the following statements? (Note that they are not mutually exclusive statements). 0 indicates that the question is not applicable to you.  

<table>
<thead>
<tr>
<th>20. This conflict was about the task we were doing</th>
<th>N/A Disagree</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
<th>Neutral Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>
21. This conflict was about our relationship
   0  1  2  3  4  5

22. This conflict was a natural part of my work experience
   0  1  2  3  4  5

23. Describe in detail what, if anything, you did in response to this conflict (use the back if you need extra space).

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

On a scale of 1 = strongly disagree to 5 = strongly agree, how would you rate the following statements? 0 indicates that the question is not applicable to you.

<table>
<thead>
<tr>
<th>Statement</th>
<th>N/A</th>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. I let the conflict go</td>
<td>0</td>
<td>1  2  3  4  5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. I talked directly to the person</td>
<td>0</td>
<td>1  2  3  4  5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. I sought informal help from someone not directly involved</td>
<td>0</td>
<td>1  2  3  4  5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. I filed a formal complaint</td>
<td>0</td>
<td>1  2  3  4  5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Check all of the following people who you went to for help with this conflict. If you spoke to more than one, indicate the order with a 1 = the first person, 2 = second person, etc.

28. ___Friend  
29. ___Co-worker  
30. ___Family member  
31. ___Team leader  
32. ___Manager/assistant director  
33. ___HR staff member  
34. ___Union representative  
35. ___Dispute resolution advisor  
36. ___Other  
37. ___None

38. Did a bystander (i.e. someone who observed the conflict, but wasn’t directly involved) intervene in any way? ___Yes ___No

On a scale from 1 = strongly disagree to 5 = strongly agree, how would you rate the following statements? 0 indicates that the question is not applicable to you.

<table>
<thead>
<tr>
<th>N/A</th>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>39. Overall, this was the fairest way to address a conflict like this</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>40. I felt that it was acceptable for me to use this conflict resolution process</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>41. I felt satisfied by this process</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>42. I felt confident that I would be able to resolve this conflict</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

43. Describe in detail what the outcome of your conflict was (use the back if you need extra space).

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
_________
44. Was this conflict resolved permanently? ___ Yes ___ No
45. If so, how long did it take from the first conflict incident to its resolution? _____

On a scale from 1 = strongly disagree to 5 = strongly agree, how would you rate the following statements? 0 indicates that the question in not applicable to you.

<table>
<thead>
<tr>
<th>N/A</th>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>46. Overall, this was the fairest outcome 0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>47. I felt satisfied by this outcome 0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Have you experienced any of the following negative consequences from being in this conflict (check all that apply)?

48. ___ Retaliation 51. ___ Damaged reputation
49. ___ Labeling 52. ___ Other
50. ___ Loss of privacy 53. ___ None

54. If you experienced any of these, please describe what happened.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

55. Have you experienced any unexpected positive after-affects from this conflict? ___ Yes ___ No
56. If so, please describe them.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

57. How familiar are you with interest-based approaches to conflict resolution?
   1) ___ Not at all 2) ___ Somewhat 3) ___ Very
58. How many hours of training in interest-based conflict resolution have you received from the agency (including Demystifying Conflicts in our Workplace)?

59. If you have had any training, how many times since then have you applied the skills you learned there?
1) ___ Never 2) ___ Once or twice 3) ___ Occasionally 4) ___ Frequently 5) ___ On a daily basis

On a scale of 1 = strongly disagree to 5 = strongly agree, how much do you agree with the following statements? 0 indicates that the question is not applicable to you.

<table>
<thead>
<tr>
<th>Question</th>
<th>N/A</th>
<th>Strongly Disagree</th>
<th>Neutral</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is acceptable to try to resolve conflicts in my workplace</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I think conflicts are always bad</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I feel confident that I can resolve conflicts when they arise</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Conflict management efforts are legitimate in my workplace.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Conflicts are a natural part of work life.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I am afraid there would be negative consequences if I tried to address conflicts.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

66. What is your current classification and level? ___________

67. Do you manage other employees? ___ Yes ___ No

68. What is your employment status? ___ term or contract ___ permanent or indeterminate

69. Are you currently in an acting position? ___ Yes ___ No

70. How long have you worked in this office? ___________

71. How long have you worked for this organization? ___________

72. Are you ___ male or ___ female?

73. What is your age? ___________

74. Do you have anything else to add?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Appendix C: Coding definitions and form

Coding definitions

Q15: Conflict description
   a) Peer-peer conflict: the parties to the dispute were at equal hierarchical levels
   b) Supervisor-subordinate: the parties to the dispute were at unequal hierarchical levels
   c) Task conflict: controversy over the job or project the parties were focusing on
   d) Relationship/interpersonal conflict: Based on animosity surrounding interpersonal relationships and entail problems with the others’ personality or dispositions.

Q23: Conflict response
   a) Avoidance: parties involved do not address or try to resolve the conflict. The other may not be aware of the problem.
   b) Direct negotiations: the conflict is addressed by the parties involved without 3rd party intervention.
   c) Arguing: the parties involved might inform one another about the conflict, but they do not try to resolve it.
   d) Coaching: parties ask advice or inform a 3rd party about the conflict, but the 3rd party doesn’t directly intervene.
   e) Escalating: parties tell a 3rd party about the conflict, and asks them to resolve the situation for them.
   f) Interest-based intervention: 3rd party intervenes to help the parties resolve their conflict by focusing on satisfying, clarifying, understanding or communicating their interests. Not focused on figuring out who is right or wrong, implementing a formal procedure (except mediation) or applying a policy.
   g) Rights-based intervention: Parties initiate a formal procedure (except mediation) that focuses on determining who is right or wrong, or applying a contract or policy.
Conflict questionnaire coding form
Survey ID Number_____

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at all present</th>
<th>Strongly present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q15: conflict description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Peer-peer conflict</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>b) Supervisor- subordinate conflict</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>c) Task conflict</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>d) Relationship conflict</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

| Q23: conflict response                              |                    |                  |
| a) Avoidance                                        | 1                  | 2                |
| b) Direct negotiation                               | 1                  | 2                |
| c) Arguing                                          | 1                  | 2                |
| d) Coaching                                         | 1                  | 2                |
| e) Escalating                                       | 1                  | 2                |
| f) Interest-based intervention                      | 1                  | 2                |
| g) Rights-based intervention                        | 1                  | 2                |

| Q43: resolution                                      |                    |                  |
| 1 = not resolved                                     |                    |                  |
| 2 = temporarily resolved                            |                    |                  |
| 3 = permanently resolved                            |                    |                  |

| Q54: negative consequences                          |                    |                  |
| a) retaliation _Yes _No                              |                    |                  |
| b) labeling _Yes _No                                 |                    |                  |
| c) loss of privacy _Yes _No                           |                    |                  |
| d) damaged reputation _Yes _No                       |                    |                  |
| e) damaged relationship _Yes _No                     |                    |                  |
| f) other _Yes _No describe                           |                    |                  |
| g) none _Yes _No                                     |                    |                  |

| Q56: positive consequences                          |                    |                  |
| a) commendation _Yes _No                             |                    |                  |
| b) improved relationship _Yes _No                   |                    |                  |
| c) led to resolution of other conflicts _Yes _No     |                    |                  |
| d) other _Yes _No describe                           |                    |                  |
| e) none _Yes _No                                     |                    |                  |
APPENDIX D: Agency Survey Variables

Independent Variables:

- Treatment (pilot), dummy variable = 1 if is a pilot site and 0 if is a comparison site
- Matched pairs (pair), dummy variable = 1 if in Comparison Two/DRS Treatment pair, = 0
  if in Negotiation/Comparison One pair.
- Interaction (pilot*pair), interaction between pilot and pair

Dependent Variables:

- Attitude about conflict (attitude), 10-item index, alpha = .89
  - Q39: overall this was the fairest way to address a conflict like this
  - Q40: I felt that it was acceptable for me to use this conflict resolution process
  - Q41: I felt satisfied by this process
  - Q42: I felt confident that I would be able to resolve this conflict
  - Q46: overall this was the fairest outcome
  - Q47: I felt satisfied by this outcome
  - Q60: it is acceptable to try to resolve conflicts in my workplace,
  - Q62: I feel confident that I can resolve conflicts when they arise,
  - Q63: conflict management efforts are legitimate in my workplace,
  - Q64: conflicts are a natural part of work life

- Avoidance (avoid), Q23a: coded open-ended

- Direct negotiation (neg), Q23b: coded open-ended

- Relationship conflict (relat), 2-item scale, alpha = .70
  - Q21: This conflict was about our relationship
  - Q15d: coded open-ended

- Task conflict (task), 2-item scale, alpha = .79
  - Q20: This conflict was about the task we were doing
  - Q15c: coded open-ended

- Resolution (resolve), 1-item, Q44: Was this conflict resolved permanently

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Appendix E: Manufacturing Survey Instrument

Conflict Survey: Tell me about your conflict experiences.

The objective of this survey is to learn about conflicts that you have experienced at work since your team formed. Corinne Bendersky, a doctoral student from the MIT Sloan School of Management, is conducting research for her dissertation.

You will be asked a series of in-depth questions about one conflict you have had since your team formed. Conflict is loosely defined as any issue you have disagreed with or felt uncomfortable about. Please take a moment to think of an example of a conflict you personally experienced. We are interested in both generic peer-peer and supervisor-subordinate conflicts. Specifically:

If you are a team member: Think about conflicts you have had with peers on your module team, or conflicts with your operations manager.

If you are an operations manager: Think about conflicts that you have had with other operations managers, with module team members on your shift or with manufacturing managers.

The only other condition is that you feel strongly about the conflict and can describe it in detail. It does not matter if the conflict was never successfully resolved.

This survey is voluntary. You are not required to participate, and we greatly appreciate participation from those who choose to be involved. If you do not want to answer a particular question, feel free to skip it.

All answers will be kept strictly confidential. To protect your privacy, the survey will be administered by the MIT researchers. At no time will company representatives see the surveys or any individual responses from them.

Thank you for your participation. Anonymous rolled-up data on conflict behavior will be shared at the end of the study.
Think about a conflict that you have experienced at work in the past few months. Select the conflict that you feel most strongly about.

1. Without mentioning names, who was involved in the conflict? (check one and describe their relationship to you.)
   a) ___ Peer(s)
   b) ___ Supervisor/Manager(s)
   c) ___ Subordinate(s)
   d) ___ Other(s): Please describe

2. How many people were involved in this conflict?

3. Was this the first time you had been in conflict with this person?
   a) ___ Yes
   b) ___ No

4. Please describe the following four things about the conflict. Make sure to cover all of them in your answer. (Feel free to write on the back if you need more than the allotted space.)
   • What were the events leading up to the conflict?
   • What were the main issues in conflict?
   • What did you do to resolve it?
   • What was the outcome of it?

5. What factors influenced your decision about how to deal with the conflict? (Check all that apply and explain your selection.)
   a) ___ History/relationship with the individual
   b) ___ Norms within my group
   c) ___ Training from Intel
   d) ___ My own personality
   e) ___ Past experience with conflict at this company
6. Did the conflict influence other people in the conflict?
   a) Yes (Who? Why?)
   b) No (Who? Why?)

7. Was the conflict resolved?
   a) Yes
   b) No
   c) Temporarily (explain)

8. Was this conflict typical of the kind of conflicts you face at work?
   a) Yes
   b) No (please explain)

9. Imagine you have an emotional bank account with 100 credits. In a normal work week, how would you divide all 100 credits among conflicts with:
   a) Peers
   b) Supervisors/Managers
   c) Subordinates
   d) Other

10. Imagine the same emotional bank account magically refreshed with another 100 credits. In a normal work week, how would you divide all the credits among conflicts about:
    a) Sharing work load
    b) Dividing resources
    c) Personality clashes
    d) Interpreting directives
    e) Doing a particular task
    f) Other (describe)
11. Your Job Title

12. Your Shift

13. Your Team
   Name (if applicable)

14. Your Name
   (so I can contact you again later for clarification if necessary)

**Optional:**

16. Race: __________
17. Sex: Male __ Female __
18. Cultural background: __________
APPENDIX F: Manufacturing Variable Measures

Survey items used to measure dependent, and control variables.

Dependent variables negotiation, avoidance, task and relationship conflict were based on coding responses to the following open-ended question:

Please describe the following four things about the conflict.

- What were the events leading up to the conflict?
- What were the main issues in conflict?
- What did you do to resolve it?
- What was the outcome of it?

Resolution was measured by:

Was the conflict resolved?

a) __ Yes
b) __ No
c) __ Temporarily (explain___________________________ )