

INTEGRATED CONFLICT MANAGEMENT SYSTEMS PAY OFF WITH LOWER LEVELS OF FORMAL GRIEVANCES AND LOWER TURNOVER RATES

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The authors analyze an eight-year, multi-source, longitudinal data set that followed a non-union health care system in the eastern United States as it implemented a major preventative conflict management initiative placing responsibility for conflict resolution directly in the hands of line managers and employees. The initiative was a system-wide implementation of conflict management interviews (CMIs) between employees and supervisors, designed to enable them to proactively resolve conflict and follow up on agreements for improving their working relationships. The authors investigate survey and personnel file data from 5,456 individuals from 2003 to 2010 and test key predictions of Integrated Conflict Management Systems (ICMS) theory. They find that employees whose managers provide high-quality CMIs have a lower likelihood of formal grievances, significantly more perceptions of participative department culture, and lower turnover rates. Collectively, these findings suggest that simply holding CMIs may not be sufficient; rather, *the quality of CMIs* may be the key to successful outcomes.

Workplace conflict is widespread and costly. Estimates suggest that US employees spend 2.8 hours per week dealing with unnecessary conflict, corresponding to approximately \$359 billion in paid hours and 385 million working days each year (CPP Global Human Capital Report 2008).

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Conflict is costly for various reasons, including those associated with the escalation of conflict into formal processes (e.g., arbitration and legal fees), as well as wasted time, distractions for individuals and departments, absenteeism, and turnover. Perhaps the most damaging outcome of conflict is dysfunctional organizational culture, which stifles change, innovation, and organizational effectiveness. Not surprisingly, conflict management initiatives and procedures have become prevalent, even outside unionized firms (Colvin 2003). Recent estimates suggest that at least 30% of Fortune 1000 corporations have implemented some type of conflict management program (Lipsky 2015).

Integrated Conflict Management Systems (ICMS) are defined as “a systematic approach to preventing, managing and resolving conflict within the organization” (Gosline et al. 2001: 8) and represent an advanced form of conflict management. We will not summarize every aspect of ICMS theory here (see references for a comprehensive review), but rather draw attention to three of its defining prescriptions about how to improve organizational effectiveness. First, ICMS theory argues that the most effective conflict management tactics are preventive rather than reactive. ICMS theorists emphasize the prevention of conflicts, or escalation into serious grievances, that require expensive and time-consuming formal processes (Lipsky, Seeber, and Fincher 2003). Of course, not all conflicts are preventable. However, ICMS place the responsibility for conflict resolution directly on managers and employees, rather than ombudspersons, human resource (HR) departments, professional mediators, arbitrators, or outside counsel (Ewing 1989; Gosline et al. 2001; Roche and Teague 2012). Second, ICMS theorists advocate for participants to be empowered and active problem solvers rather than passive observers in conflict resolution. Ideally, conflicts are resolved at the lowest organization level possible and avoid involvement of higher levels of management or external parties (Costantino and Merchant 1996). Third, ICMS emphasize long-term follow through and accountability (Conbere 2001; Lipsky et al. 2003). Employees and managers not only need to be trained in conflict resolution techniques but also have ample opportunity, time, and incentives for participating in discussions to improve accountability and ensure that conflicts stay resolved (Lipsky et al. 2003).

ICMS are designed to improve organizational effectiveness in a variety of ways (Costantino and Merchant 1996). Among many outcomes discussed in the literature, we focus on three in this study: reducing formal grievance filings, improving participative culture, and reducing employee turnover (Gosline et al. 2001; Lipsky et al. 2003).

Purpose

Despite theoretical consensus that ICMS lead to multiple positive outcomes, empirical research evaluating their organizational effectiveness remains scarce. Most evaluation research to date is limited to understanding

procedure-related perceptions such as accessibility, likelihood of future use, and fairness and impartiality of facilitators. “Many claims have been made for the overall organizational impact of the proper introduction of conflict management systems in a variety of publications. Yet it is in this area that there is the *most speculation and the least evidence*” (Lipsky et al. 2003: 237, emphasis added). Moreover, much of what we know about the efficacy of ICMS interventions comes from qualitative research, observational methods, and case studies (Gosline et al. 2001). Although process and decision perception outcomes are important in their own right, they do not give a complete picture about the extent to which ICMS accomplish many of the long-term organizational effectiveness objectives that are central to their purpose (Costantino and Merchant 1996; Roche and Teague 2012; Lipsky 2015). To fill this gap, this study evaluates a major preventative conflict management initiative in a US health care system in the eastern United States over an eight-year period. This initiative consisted of training and enabling employees and supervisors to conduct Conflict Management Interviews¹ (CMIs; Boss 1983; Whetten and Cameron 2016) with one another throughout the health system. Using a combination of survey and administrative data, we utilize ordinary least squares (OLS) and fixed effects panel regression models to test how line managers’ participation in CMIs with their employees affect formal grievances, their employees’ perceptions of department culture, and actual retention.

Conflict Management Interviews and Literature Review

CMIs are private in-person meetings between two individuals to confront and resolve prior or emerging conflicts (Cummings and Worley 2015); develop and revise action plans for collaboration; and discuss task, process, or interpersonal concerns. CMIs are widely implemented as part of leadership development initiatives to increase the quality of relationships between managers and employees (Whetten and Cameron 2016). The defining objectives of CMIs are to prevent or reduce the escalation of interpersonal problems by 1) reducing the likelihood of misunderstanding through increased communication, and 2) providing a mechanism for holding both parties accountable to their commitment to the working relationship over a sustained period of time (Boss 1983). CMIs contrast sharply with performance appraisals or performance interviews because they serve purely developmental purposes rather than act as a legal defense or an administrative basis for making pay raise or promotion decisions. In CMIs, communication and feedback are exchanged in *both* directions (upward and downward) between the supervisor and subordinate as opposed to the top-down method found in traditional performance appraisal-related meetings. Indeed, mutual problem solving is the underlying philosophy of CMIs, in contrast to a “tell and sell” philosophy in which supervisors unilaterally

¹These were also known as Personal Management Interviews or Personal Interviews in this health system.

attempt to persuade subordinates to conform to their own view of the problem and the appropriate solution (Maier 1958).

Research indicates that managers vary substantially in their buy-in and execution of CMI in their day-to-day interactions with employees (Boss and McConkie 2008). Drawing on the management literature, we reason that managers manifest this variation in implementation in three primary ways: occurrence, frequency, and quality.

Occurrence. Simply stated, some managers hold CMIs and some do not (Boss 1983; Whetten and Cameron 2016). Even if top management dictates or mandates that CMIs be conducted, some managers will choose not to do so because of time pressure, resentment, resistance to change, a lack of knowledge, or the belief that the task is not worth the time investment. Employees and managers may feel as though they are being coerced to comply with an initiative that they do not like, do not believe in, or had no input in developing (Costantino and Merchant 1996). All of these factors suggest variance in the occurrence of CMIs between managers.

Frequency. ICMS theory (Costantino and Merchant 1996; Gosline et al. 2001; Lipsky et al. 2003) advocates for consistent communication and ongoing feedback in relation to conflict. Numerous authors have identified the relative infrequency of communications about performance-related issues as a long-standing concern. In most organizations, performance appraisals occur only once per year. Murphy and Cleveland noted that “annual performance appraisals have attained near ritual status in American corporations” (1995: 372), yet research has suggested that infrequent feedback and performance-related communication can be problematic. Fairhurst (1993) found that communication frequency is positively associated with subordinates’ perceived relationship quality with their supervisors. Similarly, Kacmar, Witt, Zivnuska, and Gully (2003) found a positive relationship between communication frequency and performance ratings. Thus, managers vary in the frequency with which they engage in CMIs over time (Costantino and Merchant 1996).

Quality. Ewing (1989) observed that some managers are inherently more receptive than others to listening to the concerns of their employees, taking their input into account, and working collaboratively to resolve disagreements. Others are prone to top-down communication and decision making (Boss and McConkie 2008). Substantial empirical evidence indicates that quality of supervisor-subordinate interactions varies significantly between managers (Cogliser and Schriesheim 2000). Thus, we reason that line managers vary significantly regarding the *quality* of their interactions with employees in CMIs.

Beginning in the summer of 2001, the health care system that hosted our study launched a large-scale program in which all supervisor-subordinate dyads began holding CMIs and provided training and resources so this

could occur during regular business hours. The CEO and top management team championed this training and signaled the expectation that it would become the standard operating procedure by conducting CMI's themselves with their direct reports. The health system allowed us to collect survey data on the occurrence, frequency, and quality of CMI's over time and to examine how they were associated with three important outcomes: formal grievance filings, perceptions of participative culture, and turnover. Thus, the CMI initiative provided a unique opportunity to test the foundational predictions of ICMS theory, which asserts that the more line managers and employees are directly involved in day-to-day conflict management, the better the result (Roche and Teague 2012).

Formal Grievance Filings

Many organizations today have formal processes that employees can use to address grievances against their immediate supervisor, coworkers, top managers, policies, or the organization. Typically, a continuum of steps occur within the grievance process. These steps increase in severity, complexity, and cost as conflicts become disputes and require more formalization, written codification, involvement of multiple parties beyond the disputants, legal counsel, costs, and time commitment (Costantino and Merchant 1996; Lipsky et al. 2003). As such, employee grievance filings represent a common metric used to operationalize the level of conflict between employees and managers in organizations (Cappelli and Chauvin 1991).

A fundamental purpose of ICMS is to prevent conflicts from occurring and to reduce the extent to which they escalate to avoid more severe, time-consuming, and costly organizational responses (Gosline et al. 2001). We assert that CMI occurrence, frequency, and quality are all associated with the likelihood that individuals will file grievances within the organization's formal dispute resolution system. The literature is clear in showing that unresolved grievances are linked to a host of negative employee behaviors including shirking, sabotage, absenteeism, reduced cooperation, employee turnover, and conflict escalation (Cappelli and Chauvin 1991). When parties avoid communicating with each other, sidestep confrontation, and fail to voice their concerns, the possibility that their concerns will fester, blow out of proportion, and decrease the quality of the interpersonal relationship becomes much greater (Baumeister, Stillwell, and Wotman 1990). CMI's provide a structure and method for direct communication, problem solving, and mutual understanding between the parties in conflict (Boss 1983). By design, CMI's should reduce or eliminate the escalation of grievances by preventing them from occurring or by neutralizing them before they require involvement with other parties such as higher-level managers, HR professionals, or mediators (Ewing 1989; Lipsky et al. 2003). If implemented well, CMI's should negate the need for anyone but the actual parties in conflict to be involved in the discussion (Boss 1983; Whetten and Cameron 2016).

Theorists have long considered the impact of the interaction frequency on interpersonal conflict. In what has been called the “contact hypothesis,” they have argued that the more frequently people see each other at work, the more they will communicate and the less likely they will be to have unresolved conflicts (Coleman 1957). More recent research, however, suggests that the frequency of supportive confrontation strongly influences the escalation of conflict (Labianca, Brass, and Gray 1998). Holding CMI more frequently provides greater opportunities for misunderstandings to be communicated and problems to be resolved before they fester. Thus, we assert that the frequency of CMIs held between managers and their subordinates will be negatively associated with the likelihood of formal grievance filings.

Moreover, beyond CMI occurrence and frequency, we propose that the quality of those meetings is associated with the escalation of grievances. Managers vary significantly in their listening, communication, problem-solving, and anger management skills (Lipsky et al. 2003). Those who lack such soft skills may become controlling, defensive, dismissive, or accusatory in CMIs and exacerbate, rather than resolve, conflicts (Costantino and Merchant 1996). Drawing on these perspectives, we reason that the occurrence, frequency, and quality of CMIs will be negatively related to the likelihood of formal grievances.

H1a: Employees who report that their direct line manager conducts CMIs with them personally will be less likely to have a formal grievance documented in the organization’s conflict resolution procedure than employees who report having no CMIs with their manager.

H1b: Employee perceptions of CMI frequency will be negatively related to the likelihood that employees will have a formal grievance documented in the organization’s conflict resolution procedure.

H1c: Employee perceptions of CMI quality will be negatively related to the likelihood that employees will have a formal grievance documented in the organization’s conflict resolution procedure.

Participative Culture

Participative organizational cultures are defined by two main characteristics. First, *information* flows freely to and from employees, such that their managers provide adequate information about their work and give legitimate consideration to their upward input on work-related matters (Likert 1967). Second, employees perceive that they *control* decisions about their work. When employees feel empowered, they will perform better, be more committed to the organization, and be less likely to leave, thus collectively influencing the effectiveness of the organization (Kanter 2008). As noted, a central objective of ICMS is to create a participative culture in which a critical mass of individuals feels informed and encouraged to take responsibility for resolving problems on their own. When employees own the process and

the resolution in conflicts, they are much more likely to be satisfied and committed to the solution in the long term (Costantino and Merchant 1996).

We propose that managerial implementation of CMIs will be strongly associated with employees' perceptions of participative culture because these interviews are designed with multilateral information sharing and control in mind (Boss and McConkie 2008). Indeed, CMIs place responsibility for problem solving in the hands of employees themselves (Boss 1983). Thus, we expect employees who hold CMIs to feel that organizational culture is more participative than authoritarian. Managers who hold CMIs more frequently reinforce information sharing and control with greater consistency and engagement. Moreover, managers who provide better-quality CMIs characterized by high levels of information sharing, problem solving, and empowerment are likely to foster a greater sense of participative culture in the minds of the employees they lead. Thus, drawing on insights from ICMS theory, we hypothesize that CMI occurrence, frequency, and quality will be positively related to employee perceptions of participative culture.

H2a: Employees who report that their direct line manager conducts CMIs with them personally will have more positive culture perceptions over time.

H2b: Employee perceptions of CMI frequency will be positively related to participative culture perceptions over time.

H2c: Employee perceptions of CMI quality will be positively related to participative culture perceptions over time.

Employee Turnover

Integrated conflict management theory provides an insightful conceptual framework, which explains why CMIs would promote employee retention (Lipsky et al. 2003). This theory holds that individuals engage in either *voice* or *exit* behavior in response to dissatisfaction in relationships (Costantino and Merchant 1996). Voice responses include efforts to articulate concerns and solve problems constructively. Exit responses represent avoidance of problems, either by not confronting them or, in the most extreme form, by leaving the organization (Hirschman 1974). Costantino and Merchant (1996) argued that employee turnover may often be explained by the organization's failure to provide mechanisms for supportive confrontation and problem solving of conflicts.

Drawing on these insights from ICMS theory, we reason that CMIs will reduce the likelihood of turnover by providing employees with opportunities for proactively voicing their concerns and engaging in problem-solving behaviors with those with whom they disagree. Indeed, the purpose of CMIs is to facilitate supportive confrontation (Boss 1983). Employees whose managers do not hold CMIs may be more likely to respond to dissatisfaction in relationships by leaving the organization rather than trying to resolve their

concerns through discussion. Moreover, when CMIs are held more frequently, employees have more opportunities to resolve concerns before they develop into problems that may justify leaving. Finally, employees who report high-quality CMIs are more likely to have their concerns resolved in a constructive and respectful manner, displacing the need to avoid problems or leave the organization. Thus, we hypothesize that:

H3a: Employees who report that their direct line manager conducts CMIs with them will be less likely to separate from the organization over time than those who report that CMIs are not held.

H3b: Employee perceptions of CMI frequency will be negatively related to employee separation from the organization over time.

H3c: Employee perceptions of CMI quality will be negatively related to employee separation from the organization over time.

Methods

Research Setting

We conducted our study in a non-unionized system of health care organizations in the eastern United States that includes a set of more than 200 small-scale physician clinics, a research institute, three small acute-care hospitals (ranging from 48 to 97 beds), a nursing home, a hospice center, and a large 540-bed teaching and research hospital. Overall, the system has approximately 5,000 employees in a given year and more than 300 departments, and serves citizens in five counties across two states. In the mid-1990s the health care system experienced a major loss in revenues, cuts in budgets and hospital services, an authoritarian leadership style that fostered competition and conflict among various units and departments, widespread discontent, high turnover among the medical staff, and serious deterioration in the quality of health care. All of these factors culminated in the forced resignation of the previous CEO in 2000.

Facing numerous operational, financial, and regulatory challenges, in 2001 the health system hired a new CEO externally and implemented system-wide CMIs as a strategy for regaining a competitive edge in the regional health care market. Having helped transform a dysfunctional health system in another state, the CEO championed the conflict management initiative, believing that the prevention and quick resolution of interpersonal problems and disputes were keys to successful organizational effectiveness. He endeavored to create a culture wherein employees were empowered to solve their own problems rather than escalate them, speak up when they encountered errors or had concerns, and develop greater mutual trust with their supervisors and coworkers.

With the help of an organization development (OD) consultant, the CEO and leadership team (with employee representation) trained managers and employees in how to implement CMIs, as described at the outset of this article. In addition to the CMIs, the outside consultant held

“confrontation meetings” with nearly all departments led by executive-level managers, division heads, and director-level managers (representing more than one-third of the departments in the entire organization). The meetings were held off site over three days. Participants worked in small groups with the trained OD consultant to identify all conflicts and bring them to the attention of department members. Participants then engaged in a process called “contracting,” wherein disputing parties within departments discussed their working relationship, explored how each may be contributing to problems, and mutually planned how to resolve their differences. The outcome was a written contract detailing an action plan for how each party would behave differently in the future (Boss and McConkie 2008).

Prior to the CMI initiative launched in 2001, the host health care system had a long-standing procedure for addressing employee conflict. Under the previous policy, employees were encouraged to go to their direct supervisor (or any other manager) if they had a dispute with a coworker, manager, or the organization. If disputes could not be resolved by informal discussions, employees or supervisors were invited to contact the HR department for investigation. The HR department would then document the grievance in written form and review the matter with the relevant parties to determine what course of action to take, if any. The department provided informal consultation to resolve conflicts between the grieving employee and the supervisor (or coworker). In rare cases, the investigation would lead to corrective action for employees or supervisors. In exceptional cases, employees would seek to resolve the dispute through legal channels outside the organization. Thus, in this health system, employee grievances represented an escalation of disputes to a more formalized process.

Measures

The data for this study are drawn from a combination of survey and administrative archival data provided by the organization.

Independent Variables

Engagement surveys administered at six-month intervals asked a set of questions about CMI usage, which comprised our hypothesized independent variables. First, we asked employees a binary question of whether they had participated in a CMI with their line manager at least once (1 = yes, 0 = no). We call this measure *CMI Occurrence*. Second, based on previous research suggesting that a monthly interval is an appropriate minimum frequency benchmark for CMIs (Boss 1983), we asked employees how often they had CMIs with their line manager (1 = at least monthly, 0 = less frequently than monthly). We call this measure *CMI Frequency*. Third, we asked employees to rate the quality of their CMIs on a scale of 1 to 10 (1 = not at all helpful, 10 = completely helpful). This measure, called *CMI Quality*, is set to zero for employees who did not participate in a CMI with their line manager in the

given period. Thus, one can think of *CMI Quality* as measuring the additional impact of the quality of the CMI if one occurred.

In terms of non-hypothesized variables and controls, the engagement surveys also include two useful measures of employee's character. *Low Burnout* is the response to the question, "To what extent do you feel burned out from your work?" (1 = completely burned out, 10 = not at all burned out). *Paid Fairly* is the response to the question, "To what extent do you believe you are paid fairly, compared with the other employees within your department?" (1 = not at all, 10 = completely). In addition, we used personnel files to measure whether employees had personally participated in confrontation training meetings (*Confrontation Meeting* = 1, *No Confrontation Meeting* = 0). The authors also measured whether a given employee's first-line manager had participated in confrontation training meetings with his or her own peer group of managers (*Manager Confrontation* = 1, *No Manager Confrontation* = 0). We gathered data on tenure with the health care system, gender, race and ethnicity, and total compensation from the personnel files.

Dependent Variables

Formal Grievances. We obtained an archival record from July 2005 to June 2007 of formal grievances documented by the HR department under the health system's dispute policy.² As noted, beyond talking informally with their managers, employees could contact HR to formalize complaints against their supervisors or their coworkers for any reason. Managers could contact HR to formalize a complaint against a subordinate. Thus, formal grievances provided a measure of the extent to which interpersonal disputes "escalated" from unwritten to written form and were codified for administrative reference. Following previous literature on employee grievance filings (Bemmel and Foley 1996), we took a dichotomous approach to measuring formal grievances (Allen and Keavney 1985). Specifically, the existence of a formal grievance = 1, and no formal grievance during the period = 0.

Department Culture Perceptions. As part of the ongoing evaluation of the conflict management initiative, the organization administered employee engagement surveys to employees approximately every six months following the initiation of the confrontation training and the CMI initiative. Response rates for these surveys averaged approximately 70% completion. We measured department culture perceptions using the 18-item Likert Profile of Organizations (Likert 1967), with items adapted such that departments were the referent rather than the organization as a whole. The Likert Profile has six different dimensions of effectiveness: motivation, leadership, communication, decision making, goal setting, and empowerment. Three sample items include: "How much cooperative teamwork exists?" (response scale from 1 to 20 ranging from very little, to relatively little, to moderate, to

²Unfortunately, we did not obtain access to written grievances data before or after this time period.

Table 1. Summary Statistics

<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>CMI = 0</i>	<i>CMI = 1</i>
Formal grievance	10,251	0.028	0.164	0	1	0.027	0.028
Department culture perceptions	17,514	12.877	3.812	1	20	10.310	13.210
Separation	37,618	0.039	0.193	0	1	0.055	0.036
CMI occurrence	37,618	0.832	0.374	0	1	0	1
CMI frequency	37,618	0.274	0.446	0	1	0	0.329
CMI quality	37,618	5.792	3.514	0	10	0	6.963
Compensation (\$1,000s)	37,618	37.955	29.437	0	1072	38.271	37.891
Confrontation meeting	37,618	0.044	0.205	0	1	0.027	0.047
Manager confrontation	37,618	0.445	0.497	0	1	0.388	0.457
Tenure	37,618	8.776	7.786	0	51.5	7.810	8.971
Female	37,618	0.848	0.359	0	1	0.851	0.847
White	37,618	0.763	0.425	0	1	0.735	0.769
Black	37,618	0.196	0.397	0	1	0.217	0.192
Asian	37,618	0.012	0.110	0	1	0.012	0.012
Hispanic	37,618	0.009	0.092	0	1	0.008	0.009
Other Race/Ethnicity	37,618	0.016	0.124	0	1	0.023	0.014
Paid fairly	16,781	5.962	2.676	1	10	5.363	6.085
Low burnout	24,579	6.851	2.586	1	10	6.303	6.939
Number of unique employees	5,456						

Notes: Only level-1 employees who report directly to the department manager are included in the sample. The sample includes 5,456 unique employees observed approximately every six months between 2003 and 2010. A continuously employed level-1 employee could be observed up to 15 times. Formal grievances are observed from only July 2005 to June 2007. Responses to the department culture perceptions, paid fairly, and low burnout survey questions are not observed for every employee in each period. Boldface values in the last two columns indicate statistically significant differences ($p < 0.05$) between those who experienced a Conflict Management Interview (CMI = 1) and those who did not (CMI = 0). SD, standard deviation.

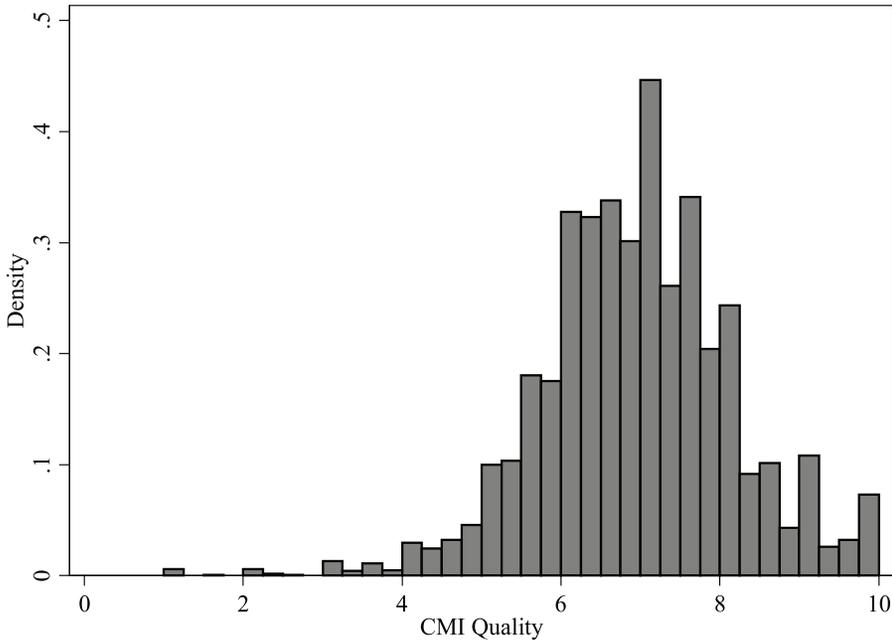
a great deal). “Which best describes management’s approach to motivation?” (response scale from 1 to 20 ranging from fear, threats, punishment and occasional rewards; to rewards and some punishment; to rewards, some punishment, and involvement; to involvement and rewards, based on the group). “How much confidence and trust is shown in employees by management?” (response scale from 1 to 20 ranging from virtually none, to some, to a substantial amount, to a great deal). Following previous research indicating that the profile represents a unidimensional scale measuring the overall culture of a unit (Butterfield and Farris 1974), we took the mean of all 18 items as a measure of department culture perceptions.

Turnover. We obtained employee turnover records from system personnel files for the duration of the study period. We measured employee separation as a binary variable coded as 1 if the employee left the organization for any reason in a given period, and 0 if the employee stayed through the given period.

Data

As reported in Table 1, our sample consists of administrative records for 5,456 unique level-1 employees who report directly to a department

Figure 1. Reported Quality of Conflict Management Interviews (CMIs) by Line Manager and Period



Notes: This figure reports the distribution of CMI Quality by manager and period. We calculate this measure by averaging the CMI Quality reported by all level-1 employee respondents in the manager's department in the given period.

manager and who responded to at least one semi-annual survey from 2003 to 2010. On average, 3.9% of level-1 employees separated from the company in each six-month period. High turnover and non-response to the employee surveys explain why we observe each unique employee on average in only 6.9 periods out of the maximum of 15.

Table 1 indicates that the fraction of level-1 employees who participate in a CMI is quite high, at 83%. However, only 27% have a CMI each month. Employees who have at least one CMI during a given period rate the helpfulness of the CMI, on a scale of 1 to 10, at 6.96, on average. Note that the sample mean for the *CMI Quality* variable reported in Table 1 includes a value of 0 for the 17% of employee-period observations where no CMI was held. To help visualize the variation in the CMI helpfulness evaluations, we take the period-specific department mean of each manager's subordinates' ratings of their CMI helpfulness (ignoring zeros if no CMI was held) and display the histogram as Figure 1. This figure indicates that the employees in most departments report average CMI helpfulness between 6 and 8. More than 90% of the period-specific department averages lie between 5 and 9.

Table 1 also indicates that across departments and time periods, 45% of managers completed a confrontation training meeting, whereas only 4% of

level-1 employees did so. The average tenure at the firm is 8.8 years. Nearly 85% of level-1 employees are female, reflecting the large number of nurse, patient care, billing, and other positions, which tend to have more female employees. The average salary is approximately \$38,000, with a small number of surgeons and other specialists (less than 0.5% of employees) with total compensation greater than \$200,000. Note that annual compensation is the only variable that we observe once per year. This means that we use the same compensation value for each pair of adjacent time periods.

Finally, we acknowledge the possibility that CMI occurrence may be explained by the existence of grievances between parties (i.e., CMIs may be held only if parties have grievances to resolve). To examine this possibility and to further explore what other factors may be associated with CMI usage, we compared those who held CMIs with those who did not on all study variables (see final two columns of Table 1). As the boldface values in Table 1 indicate, statistically significant differences are found between CMI holders and non-CMI holders on several variables, but none in formal grievances. Moreover, we found that after a formal grievance, employees were no more likely to participate in a CMI than were other employees. For example, 83.7% of those who previously had a formal grievance experience a CMI in the first period after which we no longer observe formal grievances (period 10), as compared to 83.2% of those without a formal grievance. Thus, it does not appear that CMIs are conflated with grievances.

Estimation

To estimate the effect of CMIs on our outcomes of formal grievances, employee perceptions of department culture, and employee separation, we estimate the following two specifications:

$$(1) \quad Y_{idt} = \beta_0 + \beta_1 \text{CMI Occurrence}_{idt} + \beta_2 \text{CMI Frequency}_{idt} + \beta_3 \text{CMI Quality}_{idt} \\ + \delta W_{id} + \gamma X_{idt} + \theta_t + \lambda_d + u_{idt}$$

$$(2) \quad Y_{idt} = \beta_0 + \beta_1 \text{CMI Occurrence}_{idt} + \beta_2 \text{CMI Frequency}_{idt} + \beta_3 \text{CMI Quality}_{idt} \\ + \gamma X_{idt} + \theta_t + \alpha_i + u_{idt}$$

where Y_{idt} indicates the outcome for employee i in department d in six-month period t . The variable $\text{CMI Occurrence}_{idt}$ indicates that employee i participated in at least one CMI with his or her manager of department d in time period t ; $\text{CMI Frequency}_{idt}$ indicates the employee had CMIs with the manager monthly; and CMI Quality_{idt} is employee i 's assessment of the helpfulness or effectiveness of CMIs with the manager of department d on a scale of 1 (not helpful) to 10 (completely helpful) or coded as 0 for those employees who had no CMI during the six-month period t . If no CMI occurred, $\text{CMI Quality} = 0$ and thus has no effect on outcome Y_{idt} . If a CMI occurs, the effect of that CMI on the outcome is equal to $\beta_1 + \beta_3(\text{CMI Quality}_{idt})$.

Regression model (1) includes a vector of time-invariant employee-specific controls, W_{it} , including gender, race, and ethnicity indicators. Both models include a vector of controls that may change over time, X_{it} , including employee annual total compensation, tenure, tenure squared, an indicator for employee i 's current or prior participation in confrontation training, and another for employee i 's manager's current or prior participation in confrontation training. We include the *Paid Fairly* and *Low Burnout* controls in only some specifications because of higher rates of non-response to these questions.

We found a natural increase in the percentage of level-1 employees who have a CMI with the department manager over time. In addition, natural variation appears in the separation rate over time, in particular, a decline in separations during the Great Recession in 2008. Moreover, an upward trend occurs in the average value of the Likert scale measure of department culture. To alleviate concerns of spurious correlation, we include time dummies, θ_t , which capture trends and common shocks.

One may also be concerned that differences across departments in CMI occurrence, frequency, and quality are correlated with other department characteristics that influence the outcome variables. Consequently, we control for this by including department fixed effects, λ_d , in regression model (1).

Correlation between the dependent and explanatory variables may simply be attributable to unobserved individual characteristics. Therefore, individual fixed effects, α_i , are included in specification (2) to control for all unobserved, time-invariant, individual characteristics. Employees moving to a different department are so rare in the data that including individual fixed effects makes department fixed effects redundant. With individual fixed effects, we identify the effect of CMIs from changes over time on the occurrence, frequency, and quality of CMIs, including changes in average helpfulness. By contrast, specification (1) identifies the effect of CMIs from both changes in CMIs over time as well as from cross-sectional differences in CMIs across employees within the same department. Therefore, we refer to model (1) as an OLS regression and model (2) as a fixed-effects regression. In both specifications, we report heteroscedasticity-robust standard errors, clustered by department.

Results

We begin by examining the effect of CMIs on formal grievances. Table 2 reports estimates from specification (1) in column (1) and from specification (2) in columns (2) through (5). Note that we observe formal grievances from only July 2005 to June 2007, so the number of observations is reduced. Column (1) of Table 2 suggests that CMIs reduce the likelihood of a formal grievance for a CMI of average quality by $0.0152 + 7(-0.0029) = -0.0051$. Evidence does not support that holding CMIs more frequently reduces formal grievances. The quality of CMIs seems to matter a great

Table 2. Effect of Conflict Management Interviews (CMIs) on Formal Grievances

Variable	(1) OLS	(2) FE	(3) FE	(4) FE	(5) FE
CMI occurrence	0.0152* (0.0078)	0.0118 (0.0110)		0.0128 (0.0121)	
CMI frequency	0.0064 (0.0052)	-0.0057 (0.0072)	-0.0085 (0.0103)	-0.0049 (0.0078)	-0.0076 (0.0103)
CMI quality	-0.0029*** (0.0009)	-0.0027* (0.0015)	-0.0026* (0.0016)	-0.0027* (0.0016)	-0.0020 (0.0022)
Compensation (\$1,000s)	-0.0001* (0.0001)	-0.0001 (0.0002)	-0.0001 (0.0003)	-0.0000 (0.0002)	-0.0001 (0.0003)
Confrontation meeting	-0.0001 (0.0078)	0.0162 (0.0177)	0.0160 (0.0199)	0.0175 (0.0189)	0.0165 (0.0220)
Manager confrontation	-0.0011 (0.0080)	-0.0262 (0.0168)	-0.0277 (0.0199)	-0.0268 (0.0183)	-0.0279 (0.0211)
Tenure	-0.0013* (0.0007)	0.0265** (0.0105)	0.0196* (0.0109)	0.0294** (0.0142)	0.0222 (0.0171)
Tenure squared	0.0000 (0.0000)	-0.0004** (0.0002)	-0.0003 (0.0002)	-0.0004** (0.0002)	-0.0002 (0.0002)
Paid fairly				0.0004 (0.0017)	0.0011 (0.0021)
Low burnout				0.0007 (0.0018)	0.0006 (0.0022)
Constant	0.0095 (0.0067)	-0.1183* (0.0636)	-0.0647 (0.0719)	-0.1477 (0.0990)	-0.1056 (0.1290)
Sample excludes CMI = 0	No	No	Yes	No	Yes
Observations	10,251	10,251	7,751	9,630	7,572
Number of unique employees	3,779	3,779	3,128	3,619	3,070
R ²	0.156	0.530	0.551	0.533	0.551

Notes: Column (1) includes department indicators as well as gender and race indicators: black, Asian, Hispanic, and other, with white excluded. Columns (2) through (5) include individual fixed effects (FE). Columns (1), (2), and (4) include the full sample of employee periods from July 2005 to June 2007. Columns (3) and (5) include only those employees who also had a CMI with their manager in the given period. All columns include time-period indicators. Robust standard errors in parentheses are clustered by department. OLS, ordinary least squares.

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

deal. The estimated likelihood of a formal grievance is reduced by 0.29 percentage points for every 1-point increase in the CMI helpfulness evaluation. Given a sample mean of 2.8% for formal grievances, this is a 10% reduction.

Column (2) of Table 2 reports estimates with individual fixed effects included using the same sample as in column (1). The CMI-related results are similar, with the estimated likelihood of a formal grievance reduced by 0.27 percentage points for every 1-point increase in the CMI helpfulness evaluation. Some of the other point estimates in column (2) are quite different from those in column (1), as the individual fixed effect changes the interpretation. Current or prior participation in a confrontation meeting is positively associated with having a formal grievance, which suggests that this

training was directed at level-1 employees at greater risk for (or perhaps with a history of) confrontation.³ Manager participation in a confrontation meeting is negatively associated with the employee having a formal grievance. Column (3) keeps only those observations for which the employee had a CMI with his or her manager in the given period. The estimated effect of CMI quality on the likelihood of a formal grievance is similar to those from the previous columns.

We view the consistent estimates of the effect of *CMI Quality* on the likelihood of formal grievances as strong evidence supporting Hypothesis 1c, that the employee perceptions of CMI quality will be negatively related to the likelihood that employees will have a formal grievance. The evidence for Hypothesis 1b, that the frequency of CMIs will be negatively related to the likelihood of a formal grievance, is much weaker. Once we include employee-specific fixed effects, the sign on the estimates for *CMI Frequency* are negative, as hypothesized. The point estimates are large (a 20 to 30% reduction in the likelihood of a formal grievance), but are never statistically significant. We find support for Hypothesis 1a for a CMI of average quality, but it is certainly not the case that holding a CMI uniformly reduces the likelihood of a formal grievance. For CMIs of very low quality, we find weak evidence for the idea that the CMI increases the likelihood of a formal grievance. It would be better to forgo the CMI if the quality is less than the ratio $-\beta_1/\beta_3$ in this simple linear model.

Employee attitudes are captured in the individual fixed effect to the extent that these are fixed over time. However, changes over time in employee attitude may be correlated with both CMIs (if managers are more willing to conduct them with content and engaged employees) and formal grievances. We include the *Paid Fairly* and *Low Burnout* variables in columns (4) and (5) to directly account for changes in these employee attitudes. Neither estimated effect is statistically different from zero and little effect on the CMI parameter estimates is found, though we do lose observations, which reduces the precision of the estimates. We view the estimates from columns (4) and (5) as supporting the findings from columns (2) and (3).

Turning now to an evaluation of the effect of CMIs on employee perception of department culture, Table 3 presents estimates of regression models (1) and (2), where the outcome variable is the self-reported Likert scale measuring the perceived culture of the department. The presentation of the results follows the same format as Table 2. Note, however, that department culture perception is measured on a scale of 1 to 20.

Column (1) of Table 3 suggests that CMIs improve employees' perception of department culture for a CMI of average quality by $-2.1781 + 7(0.7069) = 2.7702$. The evidence also suggests that holding CMIs more

³Participation in a confrontation meeting is relatively rare for level-1 employees. By the end of our study period, only 6.2% of these employees had participated in this training. By contrast, 56.8% of managers had participated in a confrontation meeting by the end of the study period.

Table 3. Effect of Conflict Management Interviews (CMIs) on Department Culture Perceptions

Variable	(1) OLS	(2) FE	(3) FE	(4) FE	(5) FE
CMI occurrence	-2.1781*** (0.2054)	-1.4467*** (0.2564)		-1.3410*** (0.4472)	
CMI frequency	0.1784** (0.0805)	0.2440** (0.1088)	0.2330** (0.1051)	0.1337 (0.1856)	0.1234 (0.2037)
CMI quality	0.7069*** (0.0204)	0.5351*** (0.0242)	0.5385*** (0.0238)	0.3898*** (0.0473)	0.4058*** (0.0522)
Compensation (\$1,000s)	0.0041*** (0.0012)	0.0009 (0.0012)	0.0011 (0.0011)	0.0026* (0.0014)	0.0020 (0.0015)
Confrontation meeting	0.5722** (0.2226)	1.0946** (0.4363)	0.9415** (0.4084)	0.7717*** (0.2954)	0.7506** (0.3497)
Manager confrontation	-0.2537 (0.2285)	-0.0185 (0.2061)	0.1143 (0.1858)	0.2083 (0.2908)	0.1223 (0.2375)
Tenure	-0.0040 (0.0184)	-2.3361 (2.2199)	0.2763 (1.6429)	-14.0051*** (0.6397)	-0.4514*** (0.1205)
Tenure squared	0.0006 (0.0005)	0.0022 (0.0020)	0.0038** (0.0017)	0.0061 (0.0041)	0.0053 (0.0041)
Paid fairly				0.1851*** (0.0460)	0.1919*** (0.0517)
Low burnout				0.2913*** (0.0405)	0.2705*** (0.0451)
Constant	6.2501*** (0.3499)	30.4349 (18.9315)	6.6100 (14.2280)	125.8339*** (5.4812)	10.5478*** (0.9231)
Sample excludes CMI = 0	No	No	Yes	No	Yes
Observations	17,514	17,514	15,500	9,206	8,157
Number of unique employees	3,782	3,782	3,553	3,189	2,895
R ²	0.452	0.789	0.826	0.904	0.913

Notes: Column (1) includes department indicators as well as gender and race indicators: black, Asian, Hispanic, and other, with white excluded. Columns (2) through (5) include individual fixed effects (FE). Columns (1), (2), and (4) include the full sample of employee periods who responded to the department culture survey questions. Columns (3) and (5) include only those employees who also had a CMI with their manager in the given period. All columns include time-period indicators. Robust standard errors in parentheses are clustered by department. OLS, ordinary least squares.

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

frequently improves department culture perception. Again, the quality of CMIs is most important. For every 1-point increase in *CMI Quality*, the department culture evaluation is estimated to increase by 0.7 points. Given a sample mean of 12.9 for *Department Culture*, this is a 5% increase.

Including individual fixed effects in column (2) has little effect on the estimated effects of CMIs on department culture perceptions. Participation in a confrontation meeting has a positive effect on department culture perception, whereas manager participation in a confrontation meeting has no effect. Column (3) keeps only those observations for which the employee had a CMI with his or her manager in the given period. The estimated effects for both the frequency and the quality of CMIs are similar to those from the previous columns. The *Paid Fairly* and *Low Burnout* variables in

columns (4) and (5) both have statistically significant positive effects on perceptions of department culture. Their inclusion in the regression model does somewhat reduce the point estimates for both the frequency and the quality of CMIs; however, the parameter estimate for *CMI Quality* remains statistically significant at the 1% level. The reduction in sample size from columns (2) to (4) and from (3) to (5) is quite large, suggesting caution in attributing the cause of the change in the coefficient estimates.

We view the estimates from Table 3 as strong evidence supporting Hypothesis 2c, that the employee perception of CMI quality will be positively related to the employee perception of participative culture in the department. The evidence for Hypothesis 2b, that the frequency of CMIs is positively related to department culture, is also quite strong. We also find support for Hypothesis 2a, that holding a CMI improves department culture perceptions for all CMIs except those of the worst quality. The point estimates suggest that for *CMI Quality* greater than 3.5, the effect of holding a CMI improves employee perceptions of department culture. At an average quality of 7, the positive effect on perceived department culture of holding a CMI is statistically different from 0 at the 1% level.

We examine the effect of CMIs on employee separation in our final set of results reported in Table 4A. The presentation of these results follows the same format as in the previous two tables. The estimates given in both columns (1) and (2) suggest that CMIs reduce the likelihood of employee separation for *CMI Quality* above 2 (nearly every CMI). However, the estimates from column (4), with *Low Burnout* included, suggest that CMIs of average quality have no effect on separation: $0.0183 + 7(-0.0025) = 0.0008$. The coefficient estimate on *Low Burnout* has the anticipated effect on employee separation and is highly statistically significant, even with the individual fixed effects included. Employees who start feeling burned out from their work are less likely to have a CMI with their manager than in prior periods, which explains the difference between the estimated effect of CMIs in columns (2) and (4). The strong estimated effect of *Low Burnout* and the strong correlation with *CMI Occurrence* suggests that the estimates from column (4) are more reliable than those from column (2), even though the sample is less than half the size. We view this as evidence against Hypothesis 3a.

The estimates from Table 4A provide strong evidence supporting Hypothesis 3c, that employee perception of CMI quality is negatively related to the likelihood of separation from the organization. The point estimates suggest that each 1-point increase in the CMI helpfulness rating reduces the likelihood of separation by approximately .25 percentage point, which is a 6% reduction in the probability of separation. The point estimates for the effect of *CMI Frequency* are generally negative but not statistically different from zero. We view this, at best, as quite weak evidence for Hypothesis 3b, that the frequency of CMIs reduces the likelihood of separation.

In terms of control variables, we estimate that an additional \$1,000 of total compensation causes a 0.1 percentage point reduction in the

Table 4A. Effect of Conflict Management Interviews (CMIs) on Separation

Variable	(1) OLS	(2) FE	(3) FE	(4) FE	(5) FE
CMI occurrence	0.0017 (0.0046)	0.0049 (0.0059)		0.0183* (0.0108)	
CMI frequency	-0.0033 (0.0028)	-0.0028 (0.0032)	0.0007 (0.0033)	-0.0038 (0.0058)	-0.0040 (0.0061)
CMI quality	-0.0022*** (0.0005)	-0.0025*** (0.0006)	-0.0028*** (0.0006)	-0.0025** (0.0012)	-0.0019 (0.0013)
Compensation (\$1,000s)	-0.0003*** (0.0001)	-0.0010*** (0.0001)	-0.0009*** (0.0001)	-0.0010*** (0.0002)	-0.0009*** (0.0002)
Confrontation meeting	0.0106** (0.0051)	-0.0049 (0.0093)	-0.0074 (0.0103)	-0.0197 (0.0170)	-0.0211 (0.0185)
Manager confrontation	-0.0151*** (0.0052)	-0.0154*** (0.0059)	-0.0129** (0.0058)	-0.0223** (0.0094)	-0.0145 (0.0097)
Tenure	0.0016*** (0.0004)	0.0754*** (0.0194)	0.0918*** (0.0242)	0.4948*** (0.1655)	0.4198* (0.2211)
Tenure squared	-0.0000*** (0.0000)	-0.0003*** (0.0000)	-0.0003*** (0.0000)	-0.0008*** (0.0002)	-0.0007*** (0.0002)
Paid fairly				0.0009 (0.0011)	0.0013 (0.0012)
Low burnout				-0.0044*** (0.0013)	-0.0052*** (0.0014)
Constant	0.1863*** (0.0051)	-0.3614*** (0.1020)	-0.4495*** (0.1280)	-3.4422*** (1.1926)	-2.9721* (1.6395)
Sample excludes CMI = 0	No	No	Yes	No	Yes
Observations	37,618	37,618	31,291	16,715	13,872
Number of unique employees	5,456	5,456	5,064	4,130	3,665
R ²	0.145	0.356	0.379	0.537	0.547

Notes: Column (1) includes department indicators as well as gender and race indicators: black, Asian, Hispanic, and other, with white excluded. Columns (2) through (5) include individual fixed effects (FE). Columns (1), (2), and (4) include the full sample of employee periods. Columns (3) and (5) only include those employees who also had a CMI with their manager in the given period. All columns include time-period indicators. Robust standard errors in parentheses are clustered by department. OLS, ordinary least squares.

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

probability of separation. Confrontation training for both the employee and the manager is estimated to cause a large reduction in the likelihood of separation, though the estimates on employee training are not precise given the small number of level-1 employees who ever receive the training.

A potential criticism of our fixed-effects regression approach is that we observe employees for only up to eight years, far shorter than a typical career. Of the 5,456 employees, we observe only 1,454 separations. Our fixed-effects regression model does not explicitly deal with this truncation. To address this concern we estimate a Cox Proportional Hazards model, which gives the probability of separation in each period conditional on CMI occurrence, frequency, and helpfulness as well as the other employment and demographic controls included in Table 4B. As shown in Figure 2, we

Table 4B. Cox Proportional Hazards Estimates of Risk of Separation

Variable	(1) Hazard ratio	(2) Hazard ratio	(3) Hazard ratio
CMI occurrence	1.117 (1.15)	1.229* (2.14)	1.221* (2.07)
CMI frequency	0.905 (-1.53)	0.922 (-1.25)	0.925 (-1.19)
CMI quality	0.942*** (-5.30)	0.936*** (-5.88)	0.936*** (-5.81)
Compensation (\$1,000s)		0.987*** (-8.96)	0.987*** (-8.95)
Confrontation meeting		3.044*** (6.68)	3.024*** (6.64)
Manager confrontation meeting		0.393*** (-14.11)	0.391*** (-14.16)
Tenure		0.903*** (-8.63)	0.904*** (-8.49)
Tenure squared		1.002*** (5.85)	1.002*** (5.82)
Female			0.988 (-0.18)
Black			0.906 (-1.47)
Asian			0.590 (-1.57)
Hispanic			1.224 (0.85)
Other Race/Ethnicity			1.108 (0.57)
Observations	37,549	37,549	37,549

Notes: Column (1) includes only Conflict Management Interview (CMI) occurrence, frequency, and quality. Column (2) adds compensation, training, and tenure controls. Column (3) is the full specification with gender and race variables included. The hazard ratio is reported with the *t*-statistic in parentheses.

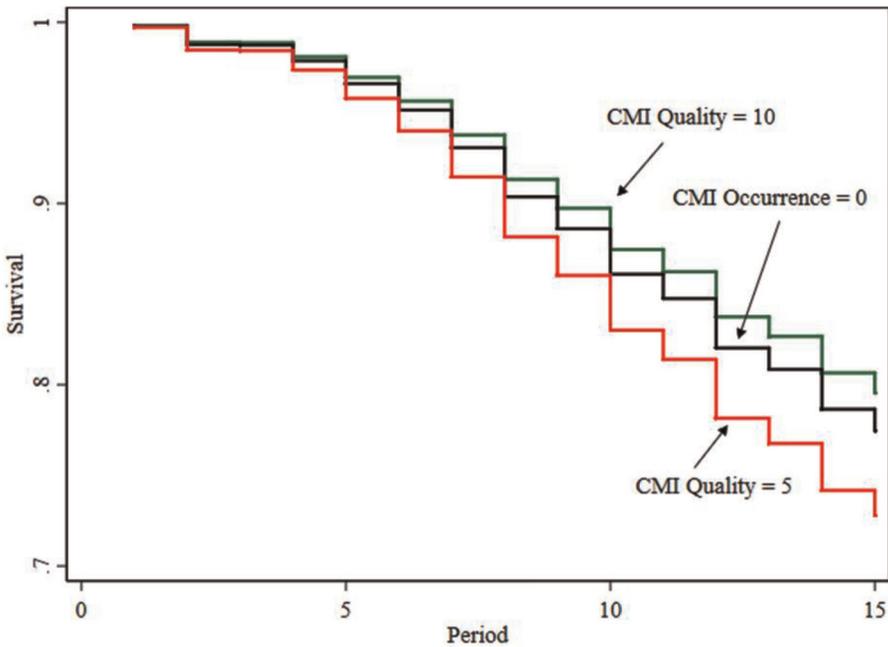
*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

plot the estimated survival rate in each time period for three groups: those who did not experience a CMI, those with a low-quality CMI, and those with a high-quality CMI. The results support the findings from Table 4A. Conditional on demographics, training, and compensation, employees who experience a high-quality CMI have lower rates of separation than those with no CMI. Employees who experience a low-quality CMI have higher rates of separation than those with no CMI.

Discussion

ICMS are designed to prevent conflict from occurring or to enable it to be resolved at the lowest possible level in an organization by placing responsibility for proactive discussion, problem solving, and follow-up directly into the hands of line managers and employees (Costantino and Merchant

Figure 2. Survival Rate (Probability of Continued Employment with the Organization)



Notes: This figure reports the Cox Proportional Hazards Model estimated probability of continued employment by six-month time period over the duration of our study under three scenarios: participating in a high-quality Conflict Management Interview (CMI), not participating in a CMI, and participating in a low-quality CMI. For comparison, the average CMI in our sample has a quality rating of approximately 7.

1996). Despite long-standing invitations for more empirical testing of the effectiveness of ICMS (Lipsky et al. 2003), evaluation studies are rare because of difficulties in finding adequate field data, especially over time. We had a unique opportunity to test key assertions of ICMS theory by tracking grievance filings, perceived culture, and turnover over eight years following the implementation of supervisor-led conflict management interviews in a large US health care system.

Across this eight-year period we found evidence that the *quality* of CMIs was associated with fewer formal grievances, more participative culture perceptions, and increased retention. We also found evidence that the occurrence and frequency of CMIs improved perceptions of participative culture. These findings broadly support the ICMS theory that conflict can indeed be effectively addressed at the supervisor–direct report level. Contrary to our expectations, we did not find evidence that the occurrence or frequency of CMIs reduces formal grievances or separations. This outcome was surprising because for years the literature has emphasized the need for consistency in structured communication between disputants to minimize opportunities for differences to fester and escalate. This research has even suggested that once per month is a minimum frequency for CMIs to be effective (Boss 1983; Whetten and Cameron

2016). Much more research is needed to replicate these findings, but it appears that when it comes to preventing conflict escalation and reducing turnover, simply holding CMIs may not be enough. It appears that *how well* line managers conduct CMIs makes the most difference in outcomes.

Practically speaking, these findings imply that organizations may “get what they pay for” in implementing conflict resolution initiatives at the line manager level. We surmise that for most supervisors, high-quality CMIs are not likely to happen without significant training, incentives, mentoring, and follow-up, led or supported by the organization. Indeed, a common approach to dealing with conflict in organizations is to either outsource the function or train a small group of HR staff, ombudspersons, or mediators to handle employee complaints when they surface (Ewing 1989; Carter 1999; Gosline et al. 2001; Lipsky et al. 2003; Roche and Teague 2012). In most organizations, the HR staff, mediators, or ombudspersons are the only recipients of systematic conflict management training. Yet in a large-scale implementation of CMIs, a much larger group of people need to be skilled at conflict management. Depending on the size of the organization, potentially hundreds of line managers and their employees would need training and development on topics such as communication, active listening, empowerment, action planning, and follow-up for CMIs. In addition, a large number of employees and supervisors would need to be given adequate time, incentives, and meeting space to hold CMIs. In the absence of this investment of time, resources, and training development, CMIs may be ineffective or even counterproductive.

Limitations and Future Research

Our study has limitations that provide directions for future research. For example, our findings emphasize the importance of quality above and beyond frequency and occurrence as drivers of success for CMI. Yet we did not study what defines CMI quality, nor did we examine how to improve it in the minds of employees and managers. Future research should explore these topics in depth to provide evidence-based guidance of training and development for CMI interventions in organizations. Future research should also explore outcome variables that we were not able to observe, for example, actual employee performance, litigation costs, clinical outcomes (in the health care industry), and financial performance.

Second, because of limitations in the availability of survey and archival data we were not able to control for all possible variables that might influence perceptions of CMI implementation (occurrence, frequency, and quality) and our outcome variables. We included department and employee fixed effects, which control for time-invariant unobserved factors. However, unobserved factors change over time, including employee job satisfaction and the characteristics of managers that may influence their proclivity to conduct PMIs.⁴

⁴Thanks to an anonymous reviewer for pointing this out.

Third, by definition, ICMS are broad in scope, often consisting of multiple practices or interventions (Lipsky et al. 2003). This was certainly the case in our research setting. In addition to CMIs, the health system implemented team building and employee engagement surveys to complement its existing HR function and formal grievance system. Thus, it is impossible to rule out the prospect that our results were influenced by these additional practices. We chose to focus our study on managerial implementation of CMIs because of ICMS theory's emphasis on line managers and resolution of conflict at the lowest possible level (Costantino and Merchant 1996; Gosline et al. 2001). Drawing on these observations, we expected CMI implementation to be the area in which we would observe the most conflict management-related variation within the health system, providing a unique opportunity to conduct an evaluation study on key predictions of ICMS theory. However, future research is needed to replicate the effects of CMI quality on key effectiveness outcomes.

Conclusion

We examined survey and archival data from a health system in the eastern United States as it implemented CMIs over an eight-year period, providing a unique opportunity to test key predictions of ICMS theory with a longitudinal design. We observed variation in line managers' implementation of this CMI initiative over time, evaluating how differences in the use, frequency, and quality of CMIs affected written grievances over a two-year period, and perceived department culture and retention over an eight-year period. We found evidence that employees whose managers provide high-quality CMIs are less likely to formalize grievances, perceive significantly more participative department culture, and experience lower turnover rates, respectively. These findings suggest that simply holding CMIs is not enough to reduce grievances and turnover; rather, the perceived quality of CMI experiences is what appears to drive results.

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