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Do it right or not at all:

A longitudinal evaluation of a conflict management system implementation

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Abstract

We analyzed an eight-year multi-source longitudinal data set that followed a healthcare system in the Eastern United States as it implemented a major conflict management initiative to encourage line managers to consistently perform *Personal Management Interviews* (or PMIs) with their employees. PMIs are interviews held between two individuals, designed to prevent or quickly resolve interpersonal problems before they escalate to formal grievances. This initiative provided us a unique opportunity to empirically test key predictions of Integrated Conflict Management System (or ICMS) theory. Analyzing survey and personnel file data from 5,449 individuals from 2003 to 2010, we found that employees whose managers provided high-quality interviews perceived significantly higher participative work climates and had lower turnover rates. However, retention was worse when managers provided poor-quality interviews than when they conducted no interviews at all. Together these findings highlight the critical role that line mangers play in the success of conflict management systems.

Workplace conflict is widespread and costly. Estimates suggest that United States (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 (CFP Global 2008). Of course, not all conflict is bad (Robbins 1978) but the counterproductive kind is costly for multiple reasons, including litigation and defense fees, wasted time and distractions for individuals and teams, absenteeism, and turnover (Bingham and Cachere 1999; Lynch 2003). 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 system (Lipsky 2015).

Conflict management scholars have developed numerous models to guide these efforts. Early conceptual frameworks differentiated between power, rights, and interest-based strategies, and suggested that organizations incorporate these as a system (Rowe 1984; Ury, Brett, and Goldberg 1988; Ewing 1989). Building on this work, a group of scholars developed Integrated Conflict Management Systems (or ICMS) which are considered the most advanced form of conflict management and represent the dominant theoretical paradigm in the scholarly literature (Costantino and Merchant 1996; Bingham and Cachere 1999; Lipsky, Seeber, and Fincher 2003). ICMS are defined as "a systematic approach to preventing, managing and resolving conflict within the organization" (Gosline et al. 2001: 8). Lipsky et al. contrasted these systems with traditional views of conflict management by noting that "organizations…must go well beyond this smaller set of processes and into more facets of organizational life, encompassing a much wider range of questions, the involvement of more part of the organization and a more complex system. They spread the responsibility for conflict and its resolution to the lowest levels of the organization. They seek to *transform* the organization not just implement a set of processes" (2003: 9, italics added). If implemented properly, ICMS are thought to have substantial positive

effects on productivity, cost reduction, morale, loyalty, retention, turnover, and employee wellbeing and attitudes (Bingham and Cachere 1999; Conbere 2001; Lynch 2003; Buss 2011).

Much has been written about what defines ICMS and how they can be successfully implemented to achieve this transformation. We will not take the time to review all of those features here (see above references for a comprehensive review), but rather draw attention to one of its key assertions: that the transformative power of ICMS is largely determined by *line managers* in their daily interactions with employees (Ewing 1989; Carter 1999; Gosline et al. 2001; Bendersky 2003; Lipsky et al. 2003; Roche and Teague 2012).

According to ICMS theory there are multiple reasons why line managers are so important to success. First, time and resource constraints make it impossible for a small employee relations department or group of arbitrators to resolve every dispute in an organization. Numerous theorists have observed that line managers must address the vast majority of conflicts in order for the organization to be effective (Ewing 1989; Lipsky et al. 2003). Thus, providing a mechanism for conflicts to be solved at the lowest level possible is essential (Rowe 1984; Lispky et al. 2003; Lipsky and Avgar 2010). Costantino and Merchant referred to this as the principle of "subsidiarity" (1996: 130). Indeed, evidence shows that long-term solutions are more likely to be upheld by grieving parties when they determine the solutions themselves (Lewicki, Hiam, and Olander 1996). Second, ICMS are by definition *proactive* rather than reactive, emphasizing prevention and early resolution. Traditional conflict management programs are designed to respond to grievances *after* they occur and then escalate them upward depending on their severity and importance. As Lynch observes, "the default reaction shifts from one of shrugging off or escalating conflict to accepting it positively and encouraging early, low level solutions" (2001: 213). If line managers have consistent, productive conversations with employees, they can address issues at their root cause before they become formal grievances and can save time by

not initiating a hierarchical grievance procedure process. ICMS can help to prevent or quickly resolve conflict because they are designed to encompass a wide range of employee attitudes, questions, concerns, and misunderstandings, in contrast to traditional procedures that focus on specific behaviors that violate policy (Lispky et al. 2003). Third, ICMS emphasize accountability (Costantino and Merchant 1996; Gosline et al. 2001). Line managers are essential because they maintain regular contact with employees and those with whom they may have disputes, thus they are in the best position to help disputing parties follow up on agreements for resolution, and hold them accountable for upholding their end of these agreements. Lipsky and colleagues observed that "managers are held accountable for the successful prevention or resolution of conflict; the reward and performance review systems in the organization reflect this duty" (2003: 19).

In summary, ICMS theory emphasizes the importance of line managers working proactively with their employees on a long-term basis to resolve conflicts at their lowest level, empowering employees to find their own solutions, covering a broad spectrum of attitudes and concerns before they become formal grievances, and providing a mechanism for accountability (Costantino and Merchant 1996; Gosline et al. 2001; Lispky et al. 2003). Despite the fact that ICMS represent the dominant theoretical paradigm in contemporary industrial relations, empirical research on their effectiveness or return on investment is scarce (Lipsky 2015), particularly from a longitudinal perspective (Costantino and Merchant 1996). A stream of research has examined how team conflict impacts team processes and performance outcomes (Alper, Tjosvold, and Law 2000) and some of these studies have examined this process over time (Jehn and Mannix 2001; Tekleab, Quigley, and Tesluk 2009). Other research has examined the impact of conflict management practices on employee outcomes. For example, in a cross-sectional analysis of firms in the telecommunications industry, Batt, Colvin, and Keefe (2002) studied how a variety of HR practices (including conflict management) impacted quit rates at the

establishment level. They found no evidence of links between nonunion dispute resolution practices and quit rates, yet they did find that dispute rates were related to higher quit rates. However, for multiple reasons, including the difficulty of collecting longitudinal data (Lipsky et al. 2003), very little research has examined the efficacy of conflict management interventions over time.

In particular, despite the emphasis that ICMS theory places on the buy-in and cooperation of line managers, little is known about how managers' implementation of conflict management activities at a micro level impacts key employee outcomes over time. Much of what we do know comes from cross-sectional and observational sources. For example, in 1985, Luthans, Rosenkratntz, and Hennesy published an observational study of 52 managers in three different US organizations. Using promotion rates as an indicator of success, they compared the behaviors of successful versus unsuccessful managers. They found that managers who provided more conflict management related behaviors to their employees (such as helping resolve interpersonal conflicts between subordinates, or between themselves and subordinates) tended to be promoted more quickly up the organizational hierarchy than managers who were less involved in conflict. More recently, Roche and Teague (2012) examined how HR and employee relations manager support of conflict management programs affected a number of firm effectiveness outcomes. In a cross-sectional regression analysis of survey data, they found that perceived supervisor conflict management engagement was positively associated with perceived labor productivity, employee relations climate, and capacity to change, and negatively related to perceived absence rates. Although these studies provide important insights suggesting that active manager involvement in conflict is important, they are limited because they do not contain a range of employee outcomes, are limited to static research designs and self-report measures, and do not examine objective outcomes.

Purpose

In summary, there have been multiple calls for research to examine the impact of ICMS on outcomes (Bingham 2004; Roche and Teague 2012) but there is very little research that investigates the sustainability and impact of ICMS over time (Costantino 2009). Much of what we know about the efficacy of ICMS interventions comes from qualitative research, observational methods, and case studies (Bingham and Pitts 2002; Nabatachi and Bingham 2010). As Lipsky and colleagues have noted, "Many claims have been made for the overall organizational impact of the proper introduction of conflict management systems in a variety of publications. Yet is in this area that there is the *most speculation and the least evidence*… [and] probably the most debated area is the impact of conflict management on employees as a group and on managers" (Lipsky et al. 2003: 237, emphasis added). In particular, we know of no empirical research that has specifically measured how line manager implementation of ICMS practices impacts their subordinates' perceptions of work attitudes and actual retention over time.

To fill this gap, we followed a US healthcare system in the Eastern United States as it implemented a major conflict management initiative. This initiative had multiple components which we will discuss further below, but its primary focus was to encourage line managers to consistently perform *Personal Management Interviews* (or PMIs) with their subordinates. PMIs are regularly held interviews between supervisors and employees designed to prevent or quickly resolve interpersonal problems before they escalate to formal grievances. This initiative provided us a unique opportunity to test key elements of ICMS theory. We utilized fixed effects panel regression models to test how line managers' participation in PMIs with their employees impacted their employees' perceptions of participative climate and actual retention over an eight-year period.

Contributions

Our study advances the literature in multiple ways. First, it represents a rare empirical test of ICMS outcomes associated with the implementation of a major conflict management system. Numerous ICMS theorists have noted the challenges of system evaluation, and this study utilizes a unique data set to answer calls for more examination of outcomes. Second, our study advances the literature by integrating ICMS theory (from industrial relations) with organization development theory (from organizational behavior and management disciplines) to provide further insight into how to effectively implement a conflict management system. We find that the quality of line managers' follow-up interviews is the most important conflict management related factor in promoting employee trust, engagement, and retention over time. Third, and finally, to our knowledge this is the first study of its kind to test the efficacy of supervisory conflict management behavior with a longitudinal research design using a combination of survey and archival data.

Theory Development: Line Managers and Employee Outcomes

One of the central tenets of ICMS theory is that conflict management practices can have significant positive effects on the employment relationship, if implemented properly (Costantino and Merchant 1996; Bingham and Cachere 1999; Conbere 2001; Gosline et al. 2001; Lynch 2003; Buss 2011). Lipsky and colleagues (2003) summarized the predictions of ICMS theory which include improvements to numerous employee-focused outcomes such as increases to morale, communication, and retention. Drawing on ICMS theory we focus here on two employee-level outcomes: perceptions of participative climate and actual retention. ICMS theory emphasizes that conflict management systems should ultimately create a participative culture where employees feel empowered to speak up, to solve problems on their own and to have a voice in matters that affect them (Ewing 1989; Costantino and Merchant 1996). Moreover, ICMS should reduce employee turnover because they strengthen trust and build relationships between

employees and their supervisors (Lispky et al. 2003). Finally, ICMS theory is clear in emphasizing that line mangers are central stakeholders in conflict management systems, such that their actions will directly impact each of these outcomes.

As noted at the outset of this paper, integrated conflict management systems are designed to be *transformative* in nature (Lipsky et al. 2003). Organizations cannot create a proactive culture where formal grievances are prevented from happening or solved quickly at the lowest possible level without undergoing significant change (Lynch 2003). Yet, as ICMS theorists have noted, key stakeholders are often resistant to change. "Change in the status quo generates suspicion, fear and resistance" (Costantino and Merchant 1996: 74), particularly among those individuals who will actually use and implement the system. Carter (1999) suggested that line managers can often be resistant to implementing conflict management practices for a variety of reasons. ICMS typically requires more time and effort from line managers on a consistent basis. They may resist implementation because their resources are scarce and they worry about accomplishing their work. Second, ICMS may be threatening to line managers because they may uncover signs that something is wrong with them or their performance. Line managers may worry that they will either be punished for results they can't control, or won't be rewarded for their time and efforts to address conflict.

Moreover, ICMS theory emphasizes the importance of top management support. Nearly all ICMS models include the observation that unless the CEO and top management team is supportive of ICMS, it will not achieve the intended transformative effects in the organization (Costantino and Merchant 1996; Gosline et al. 2001; Lipsky et al. 2003). Given the importance of top management support, it is very common for ICMS implementation to occur in a top-down direction, which provides an additional potential source of resistance from line managers. They may feel as though they are being forced or coerced to comply with an initiative that they don't

like, don't believe in, or in which they had no input. If an organization does not give line managers a voice in the design and implementation of ICMS they are likely to meet with significant resistance (Costantino and Merchant 1996; Lipsky et al. 2001). As Carter writes, "any new organizational dispute system will likely be opposed by those who believe they were winning under the old system or fear that their work will be diminished under the new system" (1999: 63).

In summary, ICMS theory asserts that the more line managers are involved and supportive of conflict management systems, the better the result (Bendersky 2003; Roche and Teague 2012). However, there are multiple sources for why individual line managers may be resistant to the system (Costantino and Merchant 1996; Carter 1999; Gosline et al. 2001; Lynch 2003). Based on these themes, we reason that there is likely to be significant variation between line managers within an organization in terms of their acceptance and day-to-day implementation of conflict management initiatives. To develop and test hypotheses about how line manager buy-in influences employee attitudes and behavior, we turn to the field of organization development which is closely intertwined with ICMS (Costantino and Merchant 1996).

Personal Management Interviews

For decades, the discipline of organization development (OD) has examined how to facilitate organizational change and sustained effectiveness (Woodman, Bingham, and Yuan 2008). Organizational change models and tactics are too numerous to list here (see Cummings 2008 for a comprehensive review) but we focus on one particular conflict management practice from OD which is indicative of line managers' acceptance of and support for ICMS. This practice is what OD scholars call the *Personal Management Interview*, or PMI (Boss 1983; Whetten and Cameron 2011; Cummings and Worley 2015). Personal management interviews are regular, private, one-on-one meetings between two people (e.g., a manager and his or her

subordinate) where both parties discuss their working relationship, follow through on previous commitments and identify and resolve any concerns or issues that may lead to conflict (Boss 1983; Whetten and Cameron 2011). They contrast sharply with performance appraisals or other meetings in at least three ways. First, they are conducted purely for developmental purposes rather than for legal defense or as an administrative basis for making pay raise or promotion decisions. Second, in PMIs, communication and feedback are exchanged in *both* directions (upward and downward) between the supervisor and subordinate as opposed to a top-down only method found in a traditional performance appraisal. Third, mutual problem solving is the underlying philosophy of PMIs, in contrast to a "tell and sell" philosophy where the supervisor unilaterally attempts to persuade the subordinate to conform to his or her own view of the problem and the appropriate solution (Maier 1958).

We observe that although the concept of the PMI comes from the OD discipline it is strikingly consistent with the key tenets of ICMS, and thus, provides a unique opportunity to test elements of ICMS theory. We argue that PMIs represent line managers' acceptance and implementation of conflict management systems because they a) are designed to be held throughout the organization to resolve conflict at the lowest levels possible (Rowe 1984; Ewing 1989; Costantino and Merchant 1996; Lipsky et al. 2003; Lipsky and Avgar 2010), b) provide a mechanism whereby managers and subordinates can hold each other accountable for agreements they have made to resolve conflict (Costantino and Merchant 1996; Gosline et al. 2001; Lispky et al. 2003), and c) are designed to be proactive in nature such that they address a wide range of employee and manager misunderstandings or concerns before they become problems or formal grievances, thus avoiding the need for escalation upward in the hierarchy, promoting prevention and early resolution (Lipsky et al. 2003; Lynch 2003). Moreover, facilitating organizational change is an objective of both the OD and ICMS literatures (Costantino and Merchant 1996;

Gosline et al. 2001; Lipsky et al. 2003; Woodman et al. 2008). To that end, multiple ICMS theorists have drawn on OD theory and practice (Conbere 2001; Lynch 2003) in describing how to properly implement conflict management systems. For example, Costantino and Merchant observed that "an open systems perspective is another important link between OD and conflict management systems design" (1996: 26).

Operationally, PMIs have two components (Whetten and Cameron 2011). The first component is known as "contracting," wherein the parties discuss their working relationship, identify conflict, explore how they each may be contributing to problems, and then mutually discuss solutions. The outcome is a written contract which details an action plan for how each party will behave differently in the future. In the second component, the two participants meet together regularly to evaluate progress implementing the action plan, discuss current concerns, and revise the contract as needed. The defining objectives of PMIs are to solve problems by a) reducing the likelihood of misunderstanding through increased communication, and b) providing a mechanism for holding both parties accountable to their contracted commitments in the working relationship over a sustained period of time (Cameron 2012).

Research shows support for the effectiveness of PMI programs in improving interpersonal relationships and performance. For example, in 16 different organizational contexts, Boss (1983) found significant differences in group effectiveness between those that performed PMIs and those that did not. Anecdotal reports are consistent with this evidence. For example, Whetten and Cameron noted that, "We have received more feedback about the success of the PMI program than almost any other management improvement techniques we have shared" (2011: 261). Yet many OD experts have observed that sustained conflict resolution is not a matter of *if* PMIs are implemented, but rather *how* they are implemented. Boss (1983) suggested, for example, that to be successful, PMIs need to be conducted in a trusting

environment, based on careful preparation, initially facilitated by third parties, and held on a regular basis. Similarly, many conflict management experts from the OD field (Boss 1983; Golembiewski 2000; Cameron 2012) have observed that a common barrier to effective PMI implementation is time pressure. “The major objection to holding these PMI sessions of course, is lack of time. Most people think that they simply cannot impose on their schedules a group of one on one meetings with each of their team members, supervisors or children” (Whetten and Cameron 2011: 263).

These literatures suggest that managers vary in their implementation of conflict-related practices in their day-to-day interactions with employees. This variation can occur in many different ways including the frequency and quality of PMIs, a subject we will examine further. Yet in its most basic form, variance will be manifest by some managers performing PMIs and some managers not performing PMIs. Even if top management dictates or mandates that PMIs are conducted, we reason that some managers will not do them, either because of time pressures, resentment, or concern that they will not be worth the investment. Drawing on the OD and ICMS theory as noted above, we hypothesize that there will be significant differences in turnover and participative climate perceptions between employees who report having PMIs with their supervisor and those who report not having them. Specifically we hypothesize that:

H1a: Employees who report that their direct line manager conducts PMIs with them personally will be less likely to separate from the organization over time.

H1b: Employees who report that their direct line manager conducts PMIs with them personally will have higher participative climate perceptions.

Integrated conflict management systems theory has explored numerous contextual factors that contribute to the effectiveness of conflict management feedback systems (Gosline et al. 2001). One such factor that has been identified in the literature is the consistency with which

conflict management activities are implemented over time (Costantino and Merchant 1996). For example, in the institutionalization of conflict management systems, Lipsky and colleagues (2003) discussed the importance of *ongoing* assessment, education, and reinforcing of communications. Similarly, in the OD literature, frequency of follow-up has been a central theme of effective change management. Numerous authors have identified that the relative infrequency of communications about performance-related issues has been a longstanding concern. It is widely recognized that 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 suggests that infrequent feedback and performance-related communication can be problematic. Studies indicate that more frequent feedback is good because it helps employees with limited resources adapt more effectively to challenges in their work environment by helping them spend their time on the highest priority tasks and correct mistakes (Carver and Scheier 1982; Earley, Northcraft, Lee, and Lituchy 1990). Additionally, researchers have suggested that frequent feedback can help subordinates develop confidence in themselves, which can increase their intrinsic motivation to complete tasks (Chhokar and Wallin 1984). And Kacmar, Witt, Zivnuska, and Gully (2003) argued that more frequent communication may reduce the likelihood that misunderstandings will arise in the relationship or that supervisors will overlook the accomplishments, good performance, or positive contributions of the subordinate. Consistent with these findings, Fairhurst (1993) found that communication frequency has a positive relationship with subordinates' perceived relationship quality with their supervisors. Similarly, Kacmar and colleagues (2003) found a positive relationship between communication frequency and performance ratings.

These findings are consistent with the predictions of ICMS theory (Costantino and Merchant 1996; Gosline et al. 2001; Lipsky et al. 2003) which advocates for consistent

communication and ongoing feedback in relation to conflict. Multiple OD theorists have suggested that PMIs should occur at least monthly to be effective (Boss 1987; Whetten and Cameron 2011; Cameron 2012). We draw on these literatures to derive what we call the *PMI frequency hypothesis*. Specifically we assert that frequent PMIs will be better than infrequent PMIs on participative management perceptions and retention outcomes, and that line managers will vary in the frequency with which they perform these actions with their direct reports.

We propose that the best way to evaluate the frequency with which line managers conduct PMIs is to consider the aggregate perceptions of their direct reports rather than the perceptions of the individuals themselves. Individual employees may have biased views of their interaction with their supervisor so it is important to look at how a particular supervisor is perceived on average by his or her *group* of direct reports. We reason that employees whose line mangers are rated by the group to hold at least monthly PMIs will have better retention and attitudes than employees whose managers are rated by the group as having less frequent PMIs. Specifically we hypothesize that:

> H2a: Employees who report that their direct line manager conducts PMIs with them at least once per month will be less likely to separate from the organization over time.
>
> H2b: Employees who report that their direct line manager conducts PMIs with them at least once per month will have higher participative climate perceptions over time.

In addition to the frequency of PMIs, both OD and ICMS theory suggests that line managers will vary significantly on the quality of their interactions with employees. Ewing (1989) notes several examples of how some managers are inherently more receptive than others at listening to the concerns of their employees, taking their input into account, and working with them to resolve disagreements. Many other experts have recommended training on conflict management to increase the likelihood of quality manager-subordinate interactions across the

organization (Costantino and Merchant 1996; Lynch 2003; Lipsky et al. 2003). Similarly there is substantial empirical evidence that quality of supervisor-subordinate interactions varies significantly between managers (Cogliser and Schriesheim 2000; Schriesheim, Castro, Zhou, and Yammarino 2001) and OD theorists have observed that some managers provide high quality PMIs to their direct reports, while others do not (Boss and McConkie 2008). Extending this logic, we propose what we call *the PMI quality hypothesis*: that PMI quality will vary between managers and that this will impact subordinates' attitudes and behavior over time. Specifically we hypothesize that:

H3a: Line managers' average PMI helpfulness ratings will be negatively related to employee separation over time.

H3b: Line managers' average PMI helpfulness ratings will be positively related to employee participative climate perceptions over time.

Finally, both the OD and ICMS literatures provide cautionary observations about the potentially damaging effects of a poor implementation of conflict management initiatives. For example, OD literature has routinely stressed the risk of building unrealistic expectations and violating trust if supervisors enter into agreements that they do not fulfill or if their words are not backed by their actions (Boss 1983; Boss and McConkie 2008). Conducting low-quality PMIs may send a negative signal that managers really aren't committed to implementing action plans made in contracting and that they have no genuine interest in change. It is possible that over time, poor quality PMIs may have the undesired effect of eroding trust, and perhaps even foster a culture of dysfunctional skepticism toward conflict management systems or other change interventions. As is the case with other management initiatives, employees can easily grow weary of the latest management fad or the next best program (Cummings and Worley 2008). Unless PMIs are taken seriously by managers and seen by employees as a legitimate means to

improving working relationships and well-being, they will not bring desired outcomes (Cameron 2012). Irrespective of good intentions, poor implementation of even the best conflict management practices can undermine their effectiveness (Costantino and Merchant 1996).

On the other hand an employee who not only receives PMIs from his or her line manager but also feels that it is helpful is likely to have much higher levels of trust with that manager, be more loyal to the organization, and feel like the work climate is more participative. Thus, we reason that doing PMIs is a necessary but not sufficient conduction for promoting retention and establishing a participative culture. Integrating ICMS and OD theory we predict an interactive effect of PMI usage and PMI helpfulness on these outcomes. Specifically we hypothesize that:

H4a. Line managers' average PMI helpfulness ratings will interact with PMI usage to impact separation such that being personally interviewed by one's direct line manager will result in lower separation rates when PMI helpfulness is higher.

H4b. Line managers' average PMI helpfulness ratings will interact with PMI usage to impact participative climate perceptions such that being personally interviewed by one's direct line manager will result in higher participative climate perceptions when PMI helpfulness is higher.

Methods

Research Setting

We conducted our study in a non-unionized system of healthcare organizations which includes a set of over 200 small 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 had approximately 5,000 employees in a given year and over 300 departments. The healthcare system serves citizens in 5 counties across 2 states in the Eastern United States. In the mid-1990s, it experienced major losses in

revenues, cuts in budgets and hospital services, an authoritarian leadership style that fostered competition and conflict among various hospital units, widespread discontent and high turnover among the medical staff, and serious deterioration in the quality of health care, all of which culminated in the forced resignation of the CEO in 2000.

The new CEO, hired externally in 2001, promptly implemented an organization-wide conflict management system. Having helped transform a dysfunctional health system in another state, the CEO had become a firm believer that prevention and quick resolution of interpersonal problems and disputes were keys to successful organizational change. He endeavored to create a participative culture wherein employees were empowered to solve their own problems rather than escalate them, speak up when they encounter errors or have concerns, and develop greater mutual trust with their supervisors and coworkers. This system had two critical components above and beyond a traditional[1] grievance system: team building for management teams, and system-wide PMI training.

Team Building

The first set of interventions that the system CEO implemented were *team building meetings* (described in detail in Boss and McConkie 2008). Led by an organization development professional, team building meetings were held offsite, typically lasting for 2-3 days per meeting. The purpose of these meetings was to help team members resolve, on their own, the interpersonal conflicts they had between each other and the team leader. As a formal part of team building meetings, participants made commitments to follow through on the solutions to interpersonal conflict they had identified in the form of a written contract (Whetten and Cameron 2011). Team building meetings were held for all management teams in the

[1] The organization had a formal grievance system in place that included an ombudsperson and trained conflict management facilitators in the Human Resource function of each organization.

system across four layers of management, beginning at the top of the organizational hierarchy and working their way down to the bottom level, consisting of department directors and their direct reports. So, for example, the first team building meeting was done with the senior administrative team (including the CEO). The next set of team building meetings were conducted with each member of the original administrative team together with their direct reports. This pattern was repeated until nearly all of the management teams had received them.

PMI Intervention

In addition to the team building meetings, the human resources department and the senior administrative team initiated PMI interventions for all system employees to help them understand what PMIs are, why they are beneficial, and how to conduct them properly. In this initiative all line managers were encouraged to begin performing regular PMIs with each of their direct reports. Line managers used their own discretion on the implementation of PMIs. Thus, line managers differed in the extent to which they conducted PMIs, the frequency with which they conducted them, and the quality with which they were given. The naturally occurring variation in PMI participation provided a unique opportunity to examine how the behavioral participation of line managers in a conflict management system impacted their employees' attitudes and behavior over time.

The conflict management efforts undertaken by this healthcare system illustrate key aspects of ICMS theory (Costantino and Merchant 1996; Gosline et al. 2001; Lipsky et al. 2003). First, the PMI initiative was designed to help line managers and employees take personal responsibility for solving interpersonal conflict on their own, without escalating conflict upward in the hierarchy (Rowe 1984; Lispky et al. 2003; Lipsky and Avgar 2010). Second, by establishing a platform for line managers and subordinates to meet often to discuss a wide variety of concerns (not just formal grievances), PMIs illustrate the proactive nature of

integrated conflict management systems in stark contrast to traditional conflict management initiatives that are more reactive in nature (Costantino and Merchant 1996; Lipsky et al. 2003). Third, PMIs establish a mechanism for both parties in the work relationship to hold each other accountable for their commitments to change, illustrating the principle of accountability in integrated systems (Lynch 2003). The team building meeting and PMI initiative as a whole had the support of the CEO, in accordance with integrated systems (Ewing 1989; Lispky et al. 2003).

Measures

The data for this study were drawn from a combination of survey and archival data provided by the host health system. As part of the ongoing evaluation of the conflict management system, the organization administered employee engagement surveys to employees approximately every six months following the initiation of the team building training and the PMI initiative. Response rates for these surveys was excellent, averaging around 70% completion. In addition to the survey data, the organization provided access to employee personnel files which enabled us to track certain demographic data, employee identification numbers, department identification numbers, participation in team building meetings, and employee turnover records.

Independent Variables

Each of the six-month engagement surveys asked a set of questions about PMI usage which comprised our hypothesized independent variables. First, we asked employees a binary question of whether or not they had participated in a PMI with their line manager at least once (1=yes, 0=no). Second, based on previous research suggesting that a monthly interval is an appropriate minimum frequency benchmark for PMIs (Boss 1983), we asked employees how often they had PMIs with their line manager (1=at least monthly, 0=less frequently than

monthly). Third, we asked employees to rate the quality of their PMIs, on a scale of 1 to 10 (1 being not at all helpful to 10 being completely helpful). A potential concern is that effective, easy-to-manage employees may be more likely to be invited to participate in PMIs with their immediate supervisor. Similarly, good-natured employees may give higher evaluation scores when asked about the helpfulness of PMIs while also being less likely to separate from the company. Thus, to test Hypothesis 3, we took the department mean of each managers' subordinate ratings of their PMI helpfulness.

In terms of non-hypothesized variables and controls, we measured employees' personal participation in team building meetings from personnel files such that 1=having participated in team building training meetings and 0=not having participated. We also measured whether a given employee's first-line manager had participated in team building meetings with his or her own peer group of managers (Manager Team Building = 1) or not (Manager Team Building = 0). We gathered compensation data, tenure, and other control variables from the personnel files.

Dependent Variables

We measured employee participative climate perceptions using the Likert Profile of Organizations, and adapted the wording so the employee's department was the referent rather than the entire organization. Likert (1967) developed a typology and measurement scale of organizations based on the authoritarian-participative climate continuum. The Likert Profile draws on employee perceptions of six climate dimensions (leadership, motivation, communication, decision making, goal setting, and control) aggregated to determine the degree to which a department is participative in its climate. The Likert Profile score ranges from 1 (the department is considered to have exploitive, coercive, and "authoritarian" management styles, whereby information flows only from the top down and is viewed with suspicion by employees) to 20 (the department is considered to be "participative", whereby communication is completely

open, flowing upward and downward with shared decision making between employees and management).

We measured employee separation as a binary variable coded as 1 if the employee left the organization in a given year and 0 if the employee stayed in a given year. These records were obtained from system personnel files.

Data

As reported in Table 1, our sample consists of administrative records for 5,449 unique level-1 employees who report directly to a department manager from 2003 until 2010. Over this period, 7.5 percent of level-1 employees separate from the company each year. High turnover along with non-response to the employee surveys explain why we observe each unique employee on average in only 3.72 years in our eight-year study period.

[Insert Table 1 about here]

Table 1 indicates that the fraction of level-1 employees who participate in a PMI is quite high, at nearly 88 percent. However, only 34 percent have a PMI each month. Table 1 also indicates that on a scale of 1 to 10, the employees rate the helpfulness of the PMI interviews at a 7, on average. Note however, that we only have a self-reported helpfulness measure for those employees who had a PMI during the given year.

Estimation

In order to estimate the effect of PMIs on our outcomes of separation and participative climate, we estimate the following specification:

$$Y_{it} = \beta_0 + \beta_1 PMI_{it} + \beta_2 monthly_{it} + \beta_3 helpful_{it} + \delta X_{it} + \lambda_t + \theta_i + u_{it} \qquad (1)$$

where Y_{it} indicates the outcome for employee i in year t. For each employee in each year, the variable PMI_{it} indicates that the employee participated in at least one PMI with his or her manager. The variable $monthly_{it}$ indicates the employee had PMIs with the manager every

month. The variable $helpful_{it}$ is employee *i*'s assessment of the helpfulness or effectiveness of PMIs given by the immediate supervisor (manager of the employee's department) in year *t* on a scale of 1 (not helpful) to 10 (completely helpful). The model also includes a vector of controls, X_{idt}, including gender, race, ethnicity, position indicators, annual total compensation, tenure, campus location, an indicator for participation in team building training, and another for the employee's manager's participation.

There is a natural increase in the percentage of level-1 employees who have a PMI with the line manager over time. There is also natural variation in the separation rate over time, in particular a decline in separations during the recession in 2008, and an upward trend in the average value of the Likert scale measure of the participative climate. To alleviate concerns of spurious correlation, we include year dummies, λ_t, in all specifications.

Correlation between the dependent and explanatory variables may simply be due to unobserved individual characteristics. Therefore, individual fixed effects, θ_i, are also included in most specifications to control for all unobserved, time-invariant, individual characteristics. This means that we identify the effect of PMIs from changes over time in the PMIs, including the frequency and helpfulness.

An alternative approach to identifying the effect of PMIs is to use the average value over all level-1 employees in the department rather than the self-reported helpfulness of PMIs as in the following specification:

$$Y_{idt} = \beta_0 + \beta_1 PMI_{it} + \beta_2 helpful_{dt} + \beta_3 PMI_{dt} + \beta_4 PMI_{it} \times helpful_{dt} + \delta X_{idt} + \lambda_t + \theta_i + u_{idt} \quad (2)$$

Similar to equation (1), Y_{idt} indicates the outcome for employee *i* in department *d* in year *t*. Note that $helpful_{dt}$ is the average reported helpfulness or effectiveness of PMIs given by the manager of department *d* in year *t* and PMI_{dt} is the fraction of employees in department *d* that participated in a PMI with the manager in year *t*. The distribution of $\underline{helpful_{dt}}$ is reported in Figure 1 and

indicates that there is large amount of variation across managers and time. Most importantly, we include an interaction between PMI_{it} and $helpful_{dt}$. The coefficient on this interaction term measures how the causal effect of PMIs depends on the PMI helpfulness of the manager.

[Insert Figure 1 here]

In all specifications, we use heteroscedasticity-robust standard errors that are clustered by department (about 300 in total).

Results

We begin by examining the effect of PMIs on employee separation as modeled in equation (1) in Table 2. Column (1) does not include individual fixed effects and suggests that having a PMI with the department manager reduces the probability of separation by a statistically significant 1.8 percentage points. However, this result does not hold up to including individual fixed effects. Column (2) indicates that failing to hold a PMI with an employee in a given year does not increase the probability of separation in that year. Thus hypothesis 1a was not supported.

[Insert Table 2 about here]

Adding a measure of frequency of PMIs does not have a large impact on the estimated effect of PMIs, nor is it statistically significant when considered jointly with PMI helpfulness, thus hypothesis 2a is not supported. However, as shown in Columns (4) and (5), the self-reported helpfulness of the PMI has a statistically significant effect on separation, even with individual fixed effects included, providing support for hypothesis 3a. The columns suggest that a one-point increase in the employee's evaluations of PMI helpfulness causes a 0.45 percentage point reduction in the probability of separation.[2] This estimated effect is statistically significant at the

[2] Note that the sample size is smaller in columns (4) and (5) because we only observe the helpfulness score if the employee reports having a PMI in the given year.

one-percent level and is quite large when compared to the baseline 7.5 percentage point probability of separation.

In terms of control variables, we estimate that an additional $1,000 of total compensation causes a 0.5 percentage point reduction in the probability of separation, even when conditioning on the employee's position and tenure. Team building training seems to have a very large effect on separation, reducing the probability of separation by 3.3 percentage points. However, there is no estimated effect from having the employee's manager receive the same training.

Table 3 reports our estimates of equation (2) with department-level variables included. All three columns include individual fixed effects. In support of hypothesis 4a the results suggest that at the mean level of manager PMI helpfulness, holding a PMI with employees has no statistically significant effect on the probability of separation.[3] In fact, at the median level of manager helpfulness, the point estimate suggests that there is a small increase in the probability of separation if a PMI is held. The other results from Table 2 –indicating that an increase in compensation and receiving team building training reduces the probability of separation—are again suggested by the results reported in Table 3.

Figure 2 graphically represents the findings reported in Table 3, though it allows for curvature in manager PMI helpfulness by including a quadratic term. It is striking that the predicted probability of separation is higher at low levels of manager PMI helpfulness for those employees who had a PMI as compared to those who did not. At about the median level of PMI helpfulness, the predicted probabilities of separation cross and we find that those who have a PMI with a manager with above-average PMI helpfulness have a reduced probability of separation.

[3] Note that the department average PMI helpfulness variable is centered at 7 in Table 3 so that the reported effect of PMI on separation in the first row is valid at the mean of the manager PMI helpfulness.

[Insert Figure 2 and Table 3 about here]

We produce two similar tables for our other outcome variable, a self-reported Likert scale measuring the participative climate of the department. Table 4 shows that in contrast to our separation findings, the strong results found with no individual fixed effects in column (1) are robust to including fixed effects in columns (2) and (3). The results suggest that having a PMI, having PMIs frequently, and having more helpful PMIs increases the employee's perception of the work environment as having a participative climate. Thus hypotheses 1b, 2b, and 3b are supported. Increases in compensation do not associate with the employee's perception of a participative climate while team building training does.

[Insert Tables 4 and 5 about here]

Table 5 reports our estimates of equation (2) with department-level variables included. With respect to the Likert scale of participative climate, PMIs not only have a strong positive effect at the median value of manager PMI helpfulness, but PMIs even have a strong positive effect at very low values of manager PMI helpfulness. Thus hypothesis 4b is supported. Figure 3 shows this graphically. Note that even allowing for curvature, the gap in perception of a participative climate between those holding PMIs and those not, grows only slowly as we increase manager PMI helpfulness. We note that we observed very similar findings when using perceived teamwork, pay satisfaction, and trust as dependent variables in these analyses.

[Insert Figure 3 about here]

Discussion

Together, these results suggest that team building meetings and PMIs appear to be useful practices, but that PMIs may be especially important. Our data also tell a nuanced story about PMIs: that simply holding a PMI is effective at improving an employee's perception of the work environment. However, poorly-conducted PMIs have the unfortunate effect of increasing

turnover, while above-average PMIs reduce turnover. Thus, our data show clear evidence that it's not if, nor necessarily how often, but *how well* line managers conduct PMIs that matters in terms of building a participative department climate, and in reducing turnover. In fact, our data show that conducting PMIs poorly can actually backfire by reducing participative climate perceptions and increasing the odds of separation from the organization. Our results give rise to a number of important theoretical and practical implications.

Theoretical Implications

First, in terms of contributions to the scholarly literature, the set of conflict management interventions implemented at the health system that hosted our study provided us with a rare opportunity to conduct an empirical test of two important predictions of ICMS theory, which are a) that line managers play a key role in the implementation of conflict management systems and b) that consistent follow-up and communication between managers and employees on a wide range of concerns will improve employee outcomes (Rowe 1984; Costantino and Merchant 1996; Gosline et al. 2001; Lispky et al. 2003). ICMS theorists have long noted the challenges of finding outcome data to conduct evaluation studies (Lipsky et al. 2003; Bingham 2004; Roche and Teague 2012: Lipsky 2015). Fortunately, this health system provided us the opportunity to examine the extent to which line managers' conflict management actions were related to two outcomes that ICMS theory identifies as important: participative management perceptions and actual employee turnover. This study provides evidence in support of ICMS that line manager behavior does appear to be linked to these outcomes over time.

Second, our study builds on previous ties in the literature by integrating ICMS theory from industrial relations with OD tools from organizational behavior to provide further insight into how to effectively implement a conflict management system. As noted in this paper, organizational change is a fundamental objective shared by both disciplines (Conbere 2001;

Lipsky et al. 2003). Indeed, ICMS theory has drawn heavily from classical OD theory including Lewin's field theory, force field analysis (Lewin 1951), and associated techniques to identify forces of and barriers to change and how to overcome them (Costantino and Merchant 1996; Lipsky et al. 2003; Rowe 1997). As Costantino and Merchant note: "The OD profession encourages a values driven and patterned approach to change, an approach that applies to change in conflict management systems as well" (1996: 27). In keeping with predictions from both disciplines about value-driven approaches to change, we find that the quality of line managers' follow-up interviews is the most important conflict management related factor in promoting participative climate and retention over time.

Finally, our study advances previous research which has extended calls to explore the mechanisms through which conflict resolution can be sustained over time (Behfar, Peterson, Mannix and Trochim 2008; Greer, Jehn, and Mannix 2008; Woodman et al. 2008). ICMS by definition are living systems that evolve in an iterative process based on action, evaluation, and feedback (Gosline et al. 2001; Lipsky et al. 2003; Lynch 2003). Our study extends the literature not only by employing a longitudinal design but by identifying key mechanisms that drive outcomes. We empirically show that sustained participative climate and retention is not a matter of if PMIs are employed, or how often, but rather how well they are conducted that is important. To our knowledge this is the first study of its kind to test the efficacy of supervisory conflict management behavior over an eight-year period using a combination of survey and archival data.

Practical Implications

In terms of practical implications we suggest that when managers and employees are introduced to PMIs, they are not only trained on how to properly conduct PMIs (Boss 1983; Cameron 2012), but also alerted to the potential consequences associated with poor-quality follow through. Our data show clear evidence that doing PMIs poorly is worse than doing none

at all. This may be for a variety of reasons: For one, poor-quality PMIs may send a message to employees that managers can't be trusted because they set high expectations that are not fulfilled. Poor-quality PMIs may also send a signal to employees that conflict management initiatives are just a fad that will not result in any true change. All individuals who participate in PMIs should be aware of the importance of making a complete investment in PMIs and should recognize that a casual or halfhearted implementation of an intervention has the potential to do more harm than good by reducing trust, building up skepticism of interventions, and fostering resistance to change.

To facilitate consistent PMIs, organizations should invest sufficient resources so that managers and employees have the time to make them high-quality interactions. Organizations may unknowingly undermine the successful implementation of a PMI program by failing to provide the training and support for people to do them well. PMIs need to lead to meaningful behavior change that is visible to employees which in turn will bring legitimacy to the process and foster buy-in that can spread throughout the organization. Attitudes toward management initiatives are contagious, and if a core group of employees sees the PMI as being a viable path to a better work life, this view is likely to be shared within teams and business units. As one employee in a previous study noted:

> "I finally realized that I couldn't afford not to meet with my boss. Shortly after the off-site [initial interview], I began to have issues with him, but there was no mechanism set up to effectively deal with those issues. As a result, problems got bigger and bigger, and things began to retrogress. I thought it was all my fault, until I learned that the only people who were having problems were the ones who weren't holding regular PMIs. Once we began those meetings, the problems began to get resolved. The nice thing about them is that now the problems get dealt with when

they are little" (Boss 1983: 78).

These anecdotes supports what ICMS theorists have collectively argued is critical to organizational change: the ability to resolve conflict early at the lowest possible level (Rowe 1984; Costantino and Merchant 1996; Lispky et al. 2003; Lipsky and Avgar 2010).

Limitations and Future Research

We acknowledge that our study has certain limitations that should be noted because they provide directions for future research contributions to the field. First, despite the fact that we tested our hypotheses in a US health system comprised of multiple hospitals and clinics, we recognize that these results may not generalize to all hospitals, or healthcare organizations, or other industries and countries. Thus, future research should examine the importance of PMI consistency in other field settings in a variety of industries and cultures.

Second, we were fortunate to have access to a multi-source data set that allowed us to examine both attitudes and behavior as an outcome of conflict management implementation. In non-hypothesized analyses we found similar results with additional employee perceptions including pay satisfaction, teamwork, and perceived resources. Yet a notable limitation of this research is that we only examined two outcome variables: participative climate perceptions and retention. Indeed, ICMS theory identifies multiple outcomes of conflict management systems, and future research should seek to explore an array of attitudinal, behavioral, and financial outcomes at multiple levels of analysis using a combination of data sources such as surveys, archival records, interviews, and qualitative methods. Actual employee performance, grievance rates, litigation costs, and clinical outcomes (in the healthcare industry) would make ideal dependent variables in follow-up research.

Third, this study tested only a portion of the predictions of ICMS theory and does not constitute a complete analysis. We focused our efforts primarily on understanding how line

manager activities vis-à-vis their direct reports impacted micro-level outcomes. Yet ICMS theory offers a variety of additional predictions about the proper design and implementation of conflict management systems that warrant additional study. For example it would be interesting to pursue evaluation research of conflict management systems from a cross-level perspective, looking at how practices and perceptions become shared at various organizational units. We reason that the adoption of conflict management practices varies across teams, departments, divisions, and organizations such that each develop their own traditions, culture, and expectations. It would be interesting for future research to address how one's membership in a certain type of culture could influence outcomes. However, it is quite possible that other contextual factors relating to the implementation of PMIs play a significant role in their success over time. For example, future research should examine the quality of the PMI process in addition to the frequency of the PMI to uncover nuances that would help managers implement them more effectively. Future research should also examine more outcomes beyond the attitudes and behaviors studied here.

Finally, a significant strength of this study is that we were able to use panel regression models to test our hypotheses with a temporal lens. However, many questions remain unexplored, particularly relating to patterns of intra-individual change at multiple levels of analysis. For example, considering line managers, it would be interesting to conduct trajectory analyses to evaluate how the pattern their PMI behavior changes over time in both frequency and quality. How would employee attitudes and retention change in response to a line manager who consistently performs PMIs for five years and then stops in year six? How would employee attitudes change in response to a line manager gradually improving her quality of PMIs? How would they change in response to a sharp increase in the quality of PMIs? To address these questions, future research could further push the frontier of ICMS theory and test them using longitudinal designs.

Conclusion

We examined survey and archival data from a health system in the United States as it implemented a major conflict management system over an eight-year period, providing a unique opportunity to test key predictions of Integrated Conflict Management System (ICMS) theory with a longitudinal design. Line managers were trained to conduct Personal Management Interviews (PMIs) with their subordinates, to prevent and/or resolve interpersonal disputes at the lowest possible level. We observed variation in line managers' implementation of this PMI initiative over this time and evaluated how differences in the use of PMIs, the frequency of PMIs, and the quality of PMIs impacted employee attitudes and behavior over time. We found evidence that employees whose line managers provide high-quality interviews perceived significantly higher participative work climates and experienced lower turnover rates over time. Interestingly, we also found that employee outcomes were worse when line managers provided poor-quality interviews than when they performed no interviews at all.

References

Alper, Steve, Dean W. Tjosvold, and Kenneth S. Law. 2000. Conflict management, efficacy and performance in organizational teams. *Personnel Psychology* 53(3): 625-642.

Batt, Rosemary, Alexander J. S. Colvin, and Jeffrey Keefe. 2002. Employee voice, human resource practices and quit rates: Evidence form the telecommunications industry. *Industrial and Labor Relations Review* 55(4): 573-594.

Behfar, Kristen. J., Peterson, Randall. S., Mannix, Elizabeth. A., and Trochim, William M.K. (2008). The critical role of conflict resolution in teams: A close look at the links between conflict type, conflict management strategies, and team outcomes. *Journal of Applied Psychology, 93* (1): 170-188.

Bendersky, Connie. 2003. Organizational dispute resolution systems: A complementarities model. *Academy of Management Review* 28(4): 643-656.

Bingham, Lisa B. 2004. Employment dispute resolution. *Conflict Resolution Quarterly* 22(1-2).

Bingham, Lisa B., and Denise R. Chachere. 1999. Dispute resolution in employment: The need for research. In A. E. Eaton and J. Keefe (Eds.), *Employment Dispute Resolution and Worker Rights in the Changing Workplace*, pp. 95-136. Champaign, IL: Industrial Relations Research Association.

Bingham, Lisa B., and David W. Pitts. 2002. Highlights of mediation at work: Studies of the national REDRESS evaluation project. *Negotiation Journal* 18(2): 135-146.

Boss, R. Wayne. 1983. Team building and the problem of regression: The personal management interview as an intervention. *The Journal of Applied Behavioral Science* 19(1): 67-83.

Boss, R. Wayne, and Mark L. McConkie. 2008. Team building. In Thomas G. Cummings (Ed.), *Handbook of Organization Development*, pp. 237-259. Thousand Oaks, CA: Sage.

Buss, Helmut. 2011. Controlling conflict costs: The business case of conflict management. *Journal of the International Ombudsman Association* 4(1): 54-62.

Cameron, Kim. 2012. *Positive Leadership: Strategies for Extraordinary Performance*. San Francisco, CA: Berrett-Koehler Publishers.

CFP Global Human Capital Report. July 2008. Workplace conflict and how businesses can harness it to thrive. *Online document accessed 3/21/2017 at:* http://img.en25.com/Web/CPP/Conflict_report.pdf

Carver, Charles S., and Michael F. Scheier. 1982. Control theory: A useful conceptual framework for personality–social, clinical, and health psychology. *Psychological Bulletin* 92(1): 111-135.

Carter, Stephanie. 1999. The importance of party buy-in in designing organizational conflict management systems. *Mediation Quarterly* 17(1): 61-66.

Chhokar, Jagdeep S., and Jerry A. Wallin. 1984. A field study of the effect of feedback frequency on performance. *Journal of Applied Psychology* 69(3): 524-530.

Cogliser, Claudia C., and Chester A. Schriesheim. 2000. Exploring work unit context and leader-member exchange: A multi-level perspective. *Journal of Organizational Behavior* 21(5): 487-511.

Colvin, Alexander J. S. 2003. Institutional pressures, human resource strategies, and the rise of nonunion dispute resolution procedures. *Industrial and Labor Relations Review* 56(3): 375-392.

Conbere, John P. 2001. Theory building for conflict management system design. *Conflict Resolution Quarterly* 19(2): 215-236.

Costantino, Cathy A. 2009. Second generation organizational conflict management systems design: A practitioner's perspective on emerging issues. *Harvard Negotiation Law Review* 14, 81-100.

Costantino, Cathy A., and Christina S. Merchant. 1996. *Designing Conflict Management Systems*. San Francisco, CA: Jossey-Bass.

Cummings, Thomas G. 2008. *Handbook of Organizational Development*. Thousand Oaks, CA: Sage Publications.

Cummings Thomas G. and Worley Christopher G. 2015. Organization Development and Change (10th Edition). Stamford CT: Cengage.

Earley, P. Christopher, Gregory B. Northcraft, Cynthia Lee, and Terri R. Lituchy. 1990. Impact of process and outcome feedback on the relation of goal setting to task performance. *Academy of Management Journal* 33(1): 87-105.

Ewing, David W. 1989. *Justice on the Job*. Boston: Harvard Business School Press.

Fairhurst, Gail T. 1993. The leader-member exchange patterns of women leaders in industry: A discourse analysis. *Communication Monographs* 60(4): 321-351.

Golembiewski, Robert T. 2000. *Handbook of Organizational Consultation*, 2nd ed. New York: Marcel Dekker.

Gosline, Ann, Lamont Stallworth, Myrna C. Adams, Notman Brand, Cynthia J. Hallberlin, Caroline S. Houk, David S. Lipsky, Jennifer Lynch, Nancy E. Peace, Mary Rowe, and Anne Thomas. 2001. *Designing Integrated Conflict Management Systems. Guidelines for Practitioners and Decision Makers in Organizations*. Ithaca, NY: Institute on Conflict Management: Cornell University.

Greer, Lindred, L., Jehn, Karen. A., and Mannix, Elizabeth A. (2008). Conflict transformation: A longitudinal investigation of the relationships between different types of intragroup

conflict and the moderating role of conflict resolution. *Small Group Research, 39*(3): 278-302.

Jehn, Karen A, and Elizabeth A. Mannix. 2001. The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal* 44(2): 238-251.

Kacmar, K. Michele, L. A. Witt, Suzanne Zivnuska, and Stanley M. Gully. 2003. The interactive effect of leader-member exchange and communication frequency on performance ratings. *Journal of Applied Psychology* 88(4): 764-772.

Lewicki, Roy J., Alexander Hiam, and Karen W. Olander. 1996. *Think Before You Speak*. New York: John Wiley and Sons.

Lewin, Kurt. 1951. *Field Theory in Social Science: Selected Theoretical Papers* (D. Cartwright Ed.). New York: HarperCollins.

Likert, Rensis. 1967. *The Human Organization: Its Management and Value*. New York: McGraw-Hill.

Lipsky, David. B. 2015. The future of conflict management systems. *Conflict Resolution Quarterly* 33 (Supplement 1): 27-34.

Lipsky, David B., and Ariel C. Avgar. 2010. The conflict over conflict management. *Dispute Resolution Journal* May October 2010: 37-43.

Lipsky, David B., Ron L. Seeber, and Richard D. Fincher. 2003. *Emerging Systems for Managing Workplace Conflict*. San Francisco: Jossey-Bass.

Luthans, Fred, Stuart A. Rosenkrantz, and Harry W. Hennessy. 1985. What do successful managers really do? An observation study of managerial activities. *The Journal of Applied Behavioral Science* 21(3): 255-270.

Lynch, Jennifer F. 2001. ADR and Beyond: A systems approach to conflict management. *Negotiation Journal* 17(3): 207-216.

Lynch, Jennifer F. 2003. Integrated conflict management programs emerge as an organization development strategy. CPR Institute for Dispute Resolution 21(5): 99-113.

Maier, Norman R. F. 1958. *The appraisal interview: Objectives, methods and skills.* New York: Wiley.

Murphy, Kevin. R., and Cleveland, Jeanette N. 1995. *Understanding Performance Appraisal: Social, Organizational and Goal Based Perspectives*. New York: Sage.

Nabatatchi, Tina, and Lisa B. Bingham. 2010. From postal to peaceful: Dispute systems design in the USPS REDRESS Program. *Review of Public Personnel Administration* 30(2): 211-234.

Robbins, Stephen P. 1978. "Conflict management" and "conflict resolution" are not synonymous terms. *California Management Review* 21(2): 67-75.

Roche, William, and Paul Teague. 2012. Do conflict management systems matter? *Human Resource Management* 51(2): 231-258.

Rowe, Mary. 1984. The non-union complaint system at MIT: An upward feedback, mediation model. *Alternatives to the High Cost of Litigation* 2(4): 10-18.

Rowe, Mary. 1997. Dispute resolution in the non-union environment: An evolution toward integrated systems for conflict management. In S. Gleason (Ed.), *Workplace Dispute Resolution: Directions for the 21st Century*, pp. 79-106. East Lansing, MI: Michigan State University Press.

Schriesheim, Chester A., Stephanie L. Castro, Xiaohua Zhou, and Francis J. Yammarino. 2001. The folly of theorizing "A" but testing "B": A selective level-of-analysis review of the field

and a detailed leader-member exchange illustration. *The Leadership Quarterly* 12(4): 515-551.

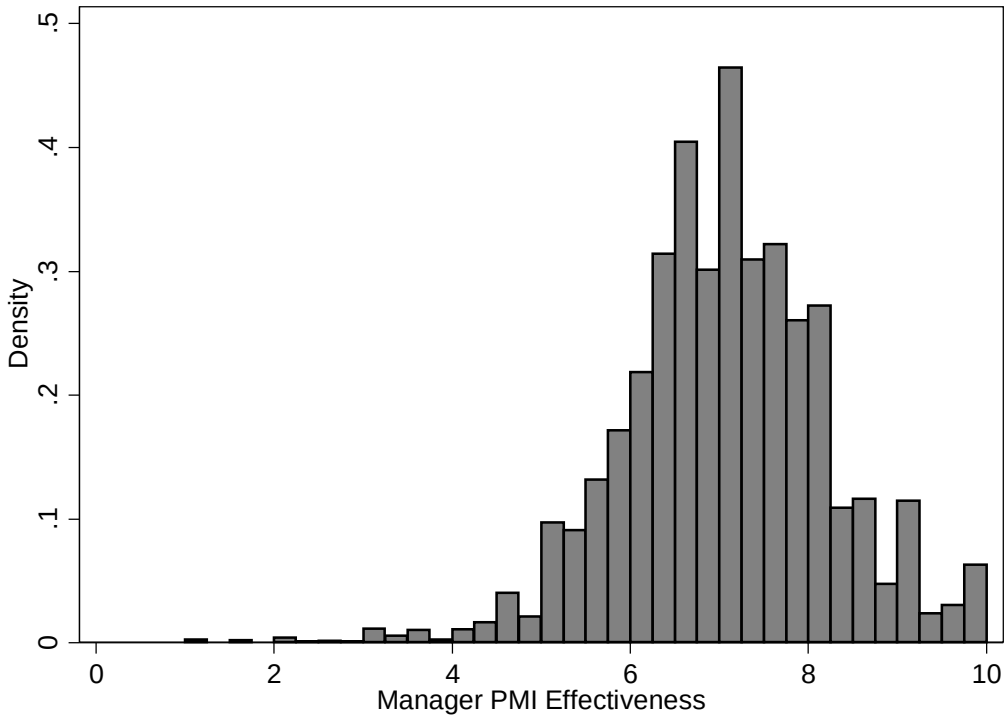
Tekleab, Amanuel G., Narda R. Quigley, and Paul E. Tesluk. 2009. A longitudinal study of team conflict, conflict management, cohesion, and team effectiveness. *Group and Organization Management* 34(2): 170-205.

Ury, William L., Jeanne M. Brett, and Stephen B. Goldberg. 1988. *Getting Disputes Resolved: Designing Systems to Cut the Cost of Conflict*. Cambridge, MA: Program on Negotiation at the Harvard Law School.

Whetten, David A., and Kim S. Cameron. 2011. *Developing Management Skills* (8th Edition). Boston, MA: Prentice Hall.

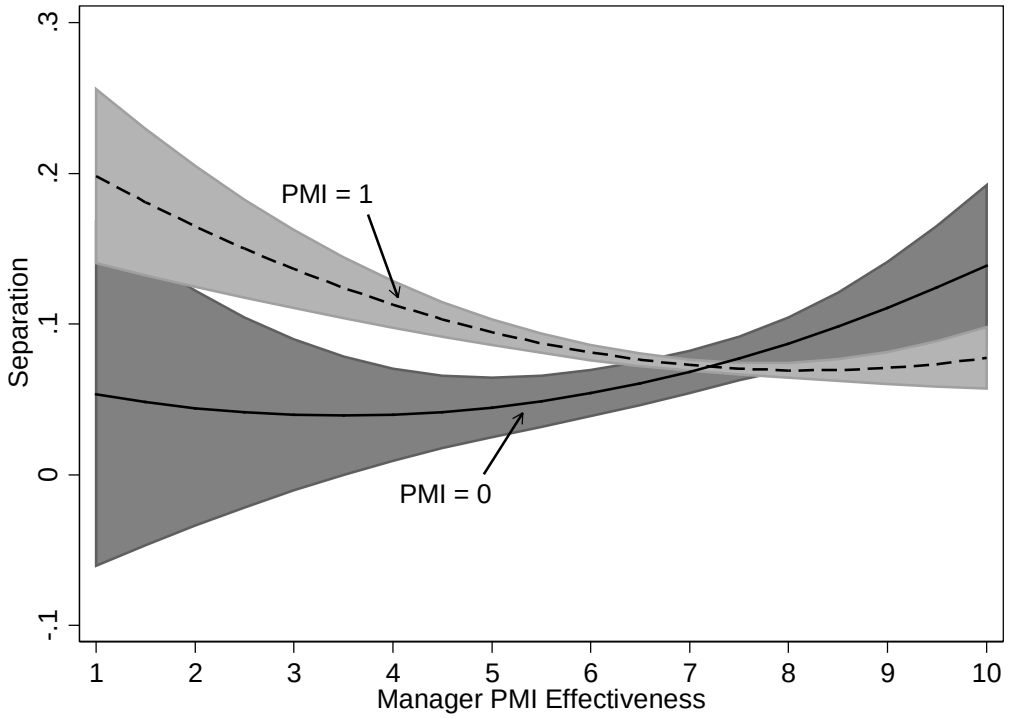
Woodman, Richard W., John B. Bingham, and Feirong Yuan. 2008. Assessing organization development and change interventions. In Thomas G. Cummings (Ed.), *Handbook of Organization Development*, pp. 187-215. Thousand Oaks, CA: Sage.

Figure 1. Reported Helpfulness of Personal Management Interviews with Line Manager by Manager and Year



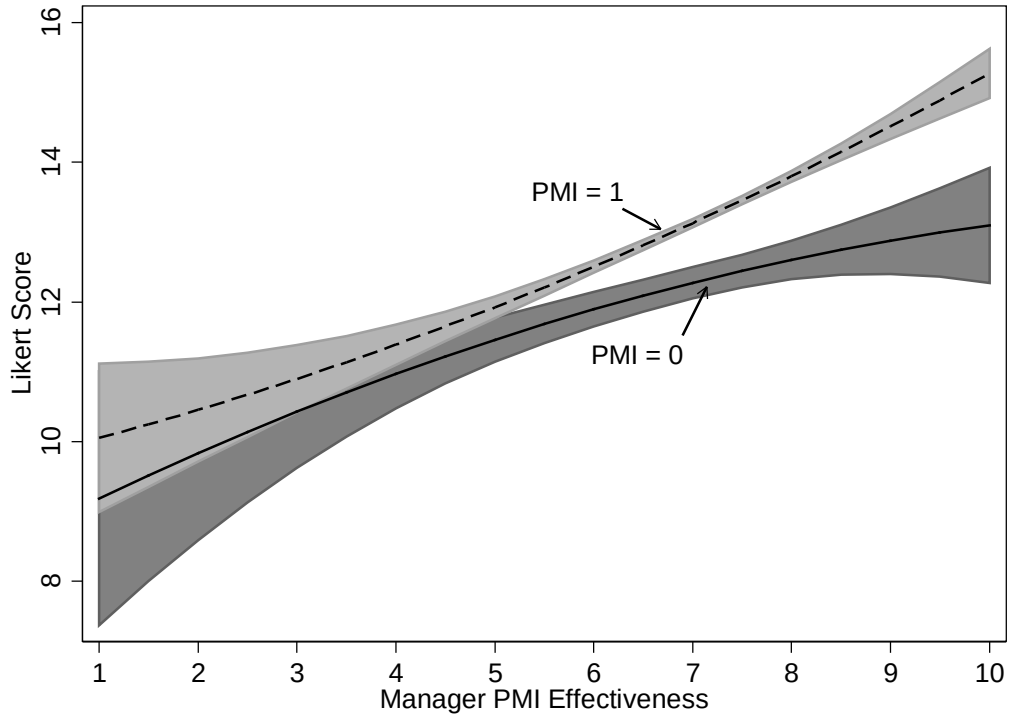
Note: We construct the variable by averaging the PMI helpfulness evaluation offered by all the employee respondents in the manager's department in the given year.

Figure 2. Predicted Separation Probability by PMI and Manager PMI Helpfulness



Note: Unlike in the reported regression tables, the predicted separation probability in the above figure is estimated in a model that includes a quadratic in the average helpfulness of the manager.

Figure 3. Predicted Participative Climate Likert Score by PMI and Manager PMI Helpfulness



Note: Unlike in the reported regression tables, the predicted participative climate in the above figure is estimated in a model that includes a quadratic in the average helpfulness of the manager.

Table 1. Summary Statistics

Variable	N	Mean	SD	Min	Max
PMI	20,292	0.878	0.327	0	1
Monthly	20,292	0.337	0.473	0	1
Helpful	17,788	7.050	2.620	1	10
Compensation ($1,000s)	20,292	40.11	36.89	0.14	1,072
Prior Training	20,292	0.045	0.207	0	1
Prior Manager Training	20,292	0.331	0.471	0	1
Tenure	20,292	7.420	7.743	0	51
Female	19,239	0.838	0.369	0	1
Black	20,290	0.192	0.394	0	1
Asian	20,290	0.013	0.111	0	1
Hispanic	20,290	0.009	0.096	0	1
Other Race/Ethnicity	20,290	0.019	0.137	0	1
Separation	20,292	0.075	0.263	0	1
Participative Climate	12,514	13.11	3.599	1	20
Number of unique employees	5,449				

Notes: Only level-1 employees who report directly to the department manager are included in the sample. The sample includes 5,449 unique employees observed in 3.72 years on average between 2003 and 2010.

Table 2: Effect of own PMI Evaluation on Individual Separation

Variable	(1) OLS	(2) FE	(3) FE	(4) FE	(5) FE
PMI	-0.0170**	0.0084	0.0114		
	(0.0085)	(0.0093)	(0.0094)		
Monthly			-0.0087	-0.0035	
			(0.0059)	(0.0059)	
Helpful				-0.0044***	-0.0045***
				(0.0012)	(0.0012)
Compensation ($1,000s)	-0.0017***	-0.0046***	-0.0046***	-0.0054***	-0.0054***
	(0.0002)	(0.0007)	(0.0007)	(0.0006)	(0.0006)
Team Building	0.0323***	-0.0293*	-0.0286*	-0.0334**	-0.0337**
	(0.0087)	(0.0160)	(0.0160)	(0.0161)	(0.0161)
Manager Team Building	-0.0403***	0.0051	0.0046	0.0086	0.0088
	(0.0041)	(0.0128)	(0.0129)	(0.0135)	(0.0134)
Tenure	-0.0133***	-0.0026	-0.0026	-0.0033	-0.0033
	(0.0009)	(0.0021)	(0.0021)	(0.0022)	(0.0022)
$Tenure^2$	0.0004***	-0.0001*	-0.0001*	-0.0001	-0.0001
	(0.0000)	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Constant	0.2593**	-0.5289	-0.5311	-0.5832	-0.5829
	(0.1048)	(0.3850)	(0.3853)	(0.4602)	(0.4601)
Observations	17,193	18,239	18,239	16,506	16,506
R-squared	0.0809	0.7115	0.7116	0.7261	0.7260

Notes: All columns include year, campus, and position indicators. Column (1) includes gender and race indicators: Black, Asian, Hispanic, and Other with White excluded. Columns (2) through (5) include individual fixed effects, which absorb gender and race. Robust standard errors are clustered by department, *** p<0.01, ** p<0.05, * p<0.1

Table 3: Effect of Department PMI Evaluation on Individual Separation

Variable	(1) FE	(2) FE	(3) FE
PMI	0.0106	0.0099	0.0033
	(0.0092)	(0.0096)	(0.0101)
Helpful Dept. Avg.	-0.0049*	-0.0049*	0.0133*
	(0.0028)	(0.0029)	(0.0080)
PMI Dept. Avg.		0.0047	0.0047
		(0.0274)	(0.0269)
PMI x Helpful Dept. Avg.			-0.0209***
			(0.0080)
Compensation ($1,000s)	-0.0047***	-0.0047***	-0.0047***
	(0.0007)	(0.0007)	(0.0007)
Team Building	-0.0306*	-0.0306*	-0.0294*
	(0.0160)	(0.0161)	(0.0165)
Manager Team Building	0.0047	0.0047	0.0046
	(0.0130)	(0.0130)	(0.0131)
Tenure	-0.0026	-0.0026	-0.0027
	(0.0021)	(0.0021)	(0.0021)
$Tenure^2$	-0.0001*	-0.0001*	-0.0001*
	(0.0001)	(0.0001)	(0.0001)
Constant	-0.5468	-0.5509	-0.5434
	(0.3968)	(0.3971)	(0.3980)
Observations	18,162	18,162	18,162
R-squared	0.7125	0.7125	0.7130

Notes: All columns include year, campus, position indicators, and individual fixed effects. The *Helpful Dept. Avg*. variable is centered at the mean level of 7. Robust standard errors are clustered by department, *** p<0.01, ** p<0.05, * p<0.1

Table 4: Effect of own PMI Evaluation on Participative Climate

Variable	(1) OLS	(2) FE	(3) FE	(4) FE	(5) FE
PMI	1.7372***	0.8780***	0.6554***		
	(0.1382)	(0.2023)	(0.2023)		
Monthly			0.6441***	0.1897	
			(0.1365)	(0.1289)	
Helpful				0.5263***	0.5324***
				(0.0280)	(0.0282)
Compensation ($1,000s)	0.0003	0.0022	0.0021	0.0026	0.0026
	(0.0014)	(0.0037)	(0.0037)	(0.0041)	(0.0041)
Team Building	0.1426	1.2583**	1.2655**	0.9451**	0.9390**
	(0.2120)	(0.5201)	(0.5187)	(0.4604)	(0.4583)
Manager Team Building	0.1133	-0.2508	-0.2065	-0.2759	-0.2903
	(0.1044)	(0.3685)	(0.3607)	(0.3021)	(0.3026)
Tenure	-0.0149	-0.0268	-0.0257	-0.0338	-0.0340
	(0.0161)	(0.0378)	(0.0376)	(0.0325)	(0.0326)
$Tenure^2$	0.0010**	0.0015	0.0015	0.0014	0.0014
	(0.0005)	(0.0015)	(0.0015)	(0.0013)	(0.0013)
Constant	14.8636***	14.3112***	14.1129***	11.2025***	11.2727***
	(1.0069)	(0.8883)	(0.9088)	(0.7620)	(0.7560)
Observations	11,459	12,492	12,492	11,238	11,238
R-squared	0.0866	0.7745	0.7768	0.8361	0.8359

Notes: All columns include year, campus, and position indicators. Column (1) includes gender and race indicators: Black, Asian, Hispanic, and Other with White excluded. Columns (2) through (5) include individual fixed effects, which absorb gender and race. Robust standard errors are clustered by department, *** p<0.01, ** p<0.05, * p<0.1

Table 5: Effect of Department PMI Evaluation on Participative Climate

Variable	(1) FE	(2) FE	(3) FE
PMI	0.8473***	0.7570***	0.8339***
	(0.1995)	(0.1922)	(0.1880)
Helpful Dept. Avg.	0.5981***	0.5964***	0.3839***
	(0.0599)	(0.0589)	(0.1407)
PMI Dept. Avg.		0.6404	0.6284
		(0.4754)	(0.4675)
PMI x Helpful Dept. Avg.			0.2505*
			(0.1419)
Compensation ($1,000s)	0.0025	0.0023	0.0025
	(0.0037)	(0.0037)	(0.0037)
Team Building	1.1307**	1.1452**	1.1402**
	(0.4644)	(0.4648)	(0.4646)
Manager Team Building	-0.1992	-0.1985	-0.1960
	(0.2988)	(0.2976)	(0.2950)
Tenure	-0.0253	-0.0251	-0.0255
	(0.0360)	(0.0359)	(0.0357)
$Tenure^2$	0.0016	0.0016	0.0016
	(0.0015)	(0.0015)	(0.0015)
Constant	14.3364***	13.8376***	13.7915***
	(0.7747)	(0.8420)	(0.8211)
Observations	12,439	12,439	12,439
R-squared	0.7853	0.7854	0.7858

Notes: All columns include year, campus, position indicators, and individual fixed effects. Robust standard errors are clustered by department, *** p<0.01, ** p<0.05, * p<0.1