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The Impact of Employee Voice and
Compliance Mechanisms on Absenteeism,
Discipline, and Turnover

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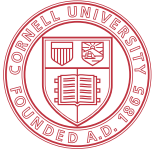
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Abstract

This study examines the impact of employee voice and compliance mechanisms on voluntary turnover and other workplace behaviors. Results from analysis of a unique, nationally representative sample of establishments in the telecommunications industry show that voice mechanisms in the form of unions and problem-solving groups are associated with significantly reduced quit rates and dismissal rates. In addition, voice mechanisms in the form of self-directed work teams are associated with lower absenteeism and discipline rates. By contrast, compliance mechanisms in the form of electronic monitoring are associated with higher discipline rates, while the compliance mechanism of strict work rules is associated with both higher quit rates and higher dismissal rates, but lower absenteeism rates. Dismissal rates also partly mediate the relationship between employee voice and compliance mechanisms and quit rates.

Introduction

In deciding how to manage the workforce, employers have a range of alternative mechanisms available to them. A simple, but powerful tool for analyzing these alternative choices is the framework of exit-voice theory (Hirschman 1970; Freeman and Medoff 1984). The exit-voice framework suggests a simple link between organizational structures and employee behavior: the greater the availability of structures for employee voice, the lower will be the incidence of exit, i.e. voluntary turnover, in response to dissatisfaction in the workplace. Given the substantial costs of employee turnover, this argument implies that it is economically rational for organizations to utilize employee voice mechanisms to the extent that the benefits of reduced turnover outweigh the costs of adopting these mechanisms.

However, in practice, the application of the exit-voice framework to decision-making about employment practices may not be so straightforward. First, voice mechanisms include a range of workplace practices, such as grievance procedures, unions, self-managed work teams, and employee problem-solving groups; and it is not clear whether the voice function of each of these is strong enough to influence exit behavior. Second, each voice mechanism may have varying effects on different types of employee behaviors -- not only quit rates but other expressions of dissatisfaction or resistance -- such as absenteeism or failure to adhere to work rules and procedures, which in turn may result in discipline or dismissal. These differentiated effects of voice mechanisms on employee behavior may, in turn, increase or decrease the organizational incentive to use these mechanisms.

A more general limitation of the existing exit-voice framework is its sole focus on the presence or absence of voice mechanisms. A common alternative approach to management is the use of employee compliance mechanisms, such as electronic monitoring and the enforcement of strict work rules. Instead of inducing desirable behaviors by providing employees with remedies for dissatisfaction, employers use compliance mechanisms to identify, punish, and correct undesirable behaviors. These two approaches are not mutually exclusive,

but may be part of a 'carrot and stick' approach to management. Although employee voice has received greater theoretical and empirical attention, employee compliance mechanisms are common tools for managing the workforce, and so it is important to understand how they affect behavior at work.

Compliance and voice systems are both control mechanisms. Compliance systems prescribe the employee's adherence to the rules, routines, conventions, and norms of the workplace. Voice systems, on the other hand, create formal mechanisms through which employees can influence the adoption and adaptation of rules, routines, conventions and norms of the workplace by way of consultation, discussion, dissension, or negotiation, while still following those rules, routines, conventions and norms until they are changed. The voice agenda may vary over time, place, and process, and the list of subjects may be broad or narrow, but all workplace voice systems create a mechanism for employee participation in workplace governance. These two workplace systems, compliance and voice, may be viewed as a modern application of Gouldner's (1954) two patterns of industrial bureaucracy: punishment-centered bureaucracy that enforces rules through disciplinary action and coercion, and representative bureaucracy, which enforces rules through education, persuasion, and participation.

In this study, we examine the effect of both employee voice and compliance mechanisms on a range of workplace behaviors, including employee quit rates and absenteeism, and employer discipline and dismissals in response to undesirable employee behavior. We examine these issues at the establishment, rather than the individual level, because the outcomes of different types of organizational policies are an important issue for human resource management decision-making. To do so, we use an original 2003 survey of a nationally representative sample of 349 establishments in the telecommunications services industry.

Theory And Hypotheses

Our approach in this paper differs considerably from that found in the organizational behavior and human resource literature on turnover. In that literature, the individual is the focal unit of analysis, and the antecedents of voluntary and involuntary turnover are conceptualized as distinct. On the one hand, absenteeism and voluntary turnover are viewed as negative for the organization, as employees express their dissatisfaction at work by withdrawing their effort either temporarily (through absences) or all together (through quitting). Employer disciplinary actions and involuntary turnover (e.g., dismissals), on the other hand, are viewed as positive steps to eliminate poor performers: "Dismissals are a function of poor individual performance or of insubordination" (McElroy, Morrow, and Rude 2001:1294). In this paper, by contrast, we argue that the antecedents of voluntary and involuntary turnover may not be as different as is conventionally portrayed. We make this argument by beginning with a discussion of the literature on voluntary turnover, and then we extend the logic of that discussion to cover absenteeism, discipline, and dismissals.

Voice Mechanisms as Deterrents to Voluntary Turnover

Exit-voice theory provides the starting point for understanding the effect of employee voice mechanisms on voluntary turnover. In the framework of Hirschman (1970), exit and voice provide two alternative options to remedying dissatisfaction with organizations. Exit is the option of ending or escaping the relationship with the organization. For example, for customers, switching supplier organizations would represent the exit option. Voice, as defined by Hirschman, is any option to remedy dissatisfaction while maintaining the relationship with the organization. In the context of employee dissatisfaction with some aspect of employment, the exit option would be to quit, whereas the voice option would be to complain to the existing employer and seek to improve employment conditions. Exit-voice theory predicts that greater viability of the voice option should reduce reliance on the exit option. Much as an organization

may improve customer retention by strengthening its customer complaints procedures, so also an organization may reduce voluntary turnover by strengthening employee voice mechanisms.

The most important application of the exit-voice framework in the employment context was Freeman and Medoff's (1984) use of it to examine the impact of unions on organizational performance. They argued that unions provide a voice function within organizations that leads to lower employee quit rates, thereby reducing the costs of turnover. Unions can lower quit rates by providing higher compensation, thereby improving pay satisfaction compared to similar nonunion jobs and reducing the incentive to quit. Whether this effect is economically advantageous to the organization depends on whether the lower turnover costs outweigh the higher compensation costs. Unions also may lower quit rates by providing opportunities for voice on other workplace issues through the grievance procedure and shop floor representation that allow employees to challenge management decisions and remedy unfair treatment.

A series of studies found evidence that unionized establishments have lower quit rates, even controlling for wage rates in the analysis, providing support for both union voice explanations (Freeman 1980; Cotton and Tuttle 1986; Wilson and Peel 1991; Miller and Mulvey 1991; Lincoln and Kalleberg 1996). More recent evidence, however, has provided more mixed results on the nature of the union voice effect. In a study of truckers, Delery et al. (2000) found that unions were associated with lower quit rates. However, this effect disappeared when wages and benefits were controlled for in the analysis, suggesting that the union effect operated only through its impact on compensation, rather than through voice in resolving workplace problems. By contrast, in a study of the telecommunications industry, Batt et al. (2002) found a sizable and statistically significant relationship between unionization and lower quit rates, even after controlling for compensation levels in the analysis. These differing results indicate the need for additional empirical evidence on the nature of the union voice effect.

A related voice mechanism in nonunion settings is the nonunion grievance procedure. In recent years, nonunion employers have increasingly adopted a range of different types of

grievance procedures (Feuille and Chachere 1995; Colvin 2003a; Lipsky, Seeber, and Fincher 2003). Although there is substantial variation in the effectiveness of these procedures (Colvin 2003b), where nonunion grievance procedures do provide stronger mechanisms for employees to remedy unfair treatment, they could lead to reduced use of the exit option and hence lower quit rates. Evidence for such an effect is, however, limited (Lewin 1999, 2005). Rees (1991) found evidence that stronger grievance procedures were associated with lower quit rates, albeit in the context of variation in union grievance procedures. Delery et al. (2000) found that formal grievance procedures were negatively associated with quit rates, but this effect became nonsignificant when the analysis controlled for unionization. Batt et al. (2002) examined the effect of different types of nonunion grievance procedures, but only found a marginally significant negative association for peer review procedures and quit rates.

A different type of voice mechanism at work may be provided by employee participation in work teams. The high performance work systems literature has examined the performance enhancing effects of team based work systems. By contrast, less attention has been paid to the role of teams as employee voice mechanisms. Some studies have included participation in work teams as part of a cluster of high performance work practices that have been found to reduce turnover (e.g. Arthur 1994; Huselid 1995; Batt 2003). However, Delery et al. (2000) found no significant relationship between employee participation and quit rates in the trucking industry. More recently, Batt et al. (2002) found both self-directed work teams and problem-solving groups to be associated with significantly lower quit rates in the telecommunications industry.

Distinguishing between the effects of self-directed work groups and problem-solving groups derives from a general distinction drawn by researchers between consultative and substantive forms of team participation (Levine and Tyson 1990). Problem-solving groups are a form of consultative participation in which workers meet periodically with management to voice their opinions and suggestions. Self-directed teams are a form of substantive participation in which teams are given a high degree of responsibility for daily decision-making in the

workplace, without direct supervision of the team by management. Although self-directed teams provide a stronger form of employee voice than do consultative groups, Cordery et al. (1991) found that autonomous teams have higher turnover rates than non-autonomous teams. A possible explanation for this finding is that while self-directed teams may have an employee voice enhancing effect, they may also lead to greater within-group self-disciplining by employees (Barker 1993), resulting in turnover of employees who fail to conform to group norms. The question then becomes whether the voice-enhancing effect of teams outweighs the group-disciplining effects of teams.

In sum, theory suggests that employee voice mechanisms should be associated with lower quit rates. The research record provides some support for this idea, but also mixed results. In particular, the existence and magnitude of the voluntary turnover reducing effect may depend on the type and strength of the employee voice mechanisms involved. For this reason, it is important to examine different types of voice mechanisms separately to determine their relationship to quit rates.

Hypothesis 1: Employee voice mechanisms (unions, self-directed teams, problem-solving groups, nonunion grievance procedures) will reduce voluntary turnover (quit rates).

Voice Mechanisms and Other Workplace Behaviors

The initial exit-voice framework focused on quits as the employee behavioral response representing the exit option. However, it is plausible that other types of behavioral responses could be affected by the presence or absence of employee voice mechanisms. Indeed, the exit-voice framework has been extended by some researchers to include additional types of responses. In the exit-voice-loyalty-neglect model of Rusbult, Farrell, Rogers, and Mainous (1988), neglect behaviors, such as absenteeism, were identified as an additional response to dissatisfaction in the workplace. Rusbult et al. (1988) defined neglect behaviors as, "...passively allowing conditions to deteriorate through reduced interest or effort, chronic lateness or

absences, using company time for personal business, or increased error rate.” (at 601)

Similarly, research in organizational behavior conceptualizes both absenteeism and turnover as withdrawal behaviors (e.g., Hom and Griffith 1995). Whereas the term “neglect behaviors” categorizes workers as responding passively, “withdrawal behaviors”, which we will use here, is preferable in that it encompasses the idea that workers may also be actively withdrawing effort as an act of protest or resistance to perceived mistreatment. In this sense, some withdrawal behaviors can be viewed as a partial individual analogue to the collective withdrawal of effort by labor in strikes. This line of argument suggests that availability of employee voice mechanisms, e.g. grievance procedures, should reduce absenteeism as well as quits (Klaas, Heneman, and Olson 1991).

Extending this argument to employers’ disciplinary and dismissal activities is less straightforward, but not implausible. While much of the literature in organizational behavior views dismissals as the result of poor performance or a poor fit between employee and employer, dismissals may also be the result of managerial incompetence -- poorly designed work processes or rules or inadequate training -- that make it difficult for employees to effectively perform their jobs. If this is the case, then better performing employees with good external labor market opportunities may quit, while worse performing employees with few external options may be disciplined and fired. Voice mechanisms under these conditions, therefore, provide opportunities to correct problems in work processes, rules, or training so that employees are able to perform effectively, and in turn, avoid discipline and dismissal.

However, here it is important to distinguish between availability of voice mechanisms, such as grievance procedures, and aggregate levels of use of voice mechanisms, such as grievance rates (Lewin 1999: 177). It may be that while availability of voice mechanisms reduces absenteeism or other withdrawal behaviors compared to the absence of voice mechanisms, use of voice, measured by the grievance rate, is positively associated with absenteeism, since both are manifestations of generally higher levels of workplace conflict.

Whereas the existing research has shown a positive relationship between grievance rates and absenteeism rates (Katz, Kochan, and Gobeille, 1983; Katz, Kochan, and Weber, 1985; Klaas, Heneman, and Olson, 1991), evidence is more limited or lacking on the degree to which the presence or absence of voice mechanisms affects absenteeism.

Hypothesis 2: Employee voice mechanisms (unions, self-directed teams, problem-solving groups, non-union grievance procedures) will reduce withdrawal behavior (absenteeism) and employer disciplinary action (discipline, dismissals).

Employee Compliance Mechanisms and Voluntary Turnover

So far, our discussion has followed the exit-voice framework's emphasis on voice mechanisms and workplace behavior. The alternative side of the coin is to consider the relationship between employee compliance mechanisms and these same workplace behaviors. By compliance mechanisms, we mean organizational or technological systems put in place by management to monitor and control employee behavior and performance. These mechanisms are a counterpoint to voice mechanisms in the sense that they provide methods for management to ensure that even where employee dissatisfaction is present, employees will maintain desired performance standards. Although voice mechanisms have received much greater attention in the academic literature, it may be that employee compliance mechanisms are of equal or greater importance in many workplaces.

For example, in the telecommunications industry, electronic monitoring is a very important and widespread mechanism used to monitor and control the work of call center workers. Employees typically view this monitoring as an invasion of privacy and a source of stress, and several studies have found that routinized work and high levels of electronic monitoring lead to stress, anxiety, depression, and emotional exhaustion (Carayon 1993; Deery, Iverson and Walsh 2002; Holman, Chissick, and Totterdell 2002; Singh 2000). Deery et al. (2002) found that scripts, routinization, high workloads, and managerial emphasis on quantity predicted emotional exhaustion, which in turn predicted absenteeism. Electronic monitoring of

field technicians has also become commonplace, as the use of laptop computers and satellite tracking of the location of repair trucks allows on-going surveillance of employees.

At the same time, traditional employee compliance methods remain important. Prominent here are strict rules of work behavior and the imposition of punishment for violation of these rules. For example, even in workplaces known for their investment in high performance type work systems, relatively draconian “three strikes” type rules exist, in which employee dismissal is automatic for three unexcused absences (Colvin 2004).

What is the likely effect of these employee compliance mechanisms on voluntary turnover? A direct, intended consequence of employee compliance mechanisms is to identify and correct or punish low performing employees. If these compliance mechanisms are effective, we would expect low performing employees to be subject to punishment, correction, poor performance appraisals, and other negative consequences for their performance. Given the undesirability of these negative consequences, we would expect employees subject to them to be more likely to quit and find alternative employment. As a result, workplaces that make extensive use of employee compliance mechanisms are likely to experience higher voluntary turnover among lower performing employees. The higher quit rates may be seen as a positive effect by organizations, correcting for failures in selection decisions (Delery et al. 2000).

However, high performing workers may also react negatively to these compliance mechanisms because they make work more onerous and dissatisfying. To take an example from the telecommunications industry, even a high performing worker in a call center may become dissatisfied and choose to quit if her work time is so tightly restricted that she has inadequate time to use the restroom during her workday. In addition, extensive use of compliance mechanisms sends a signal that management has low levels of trust in employees. Much as high commitment work systems signal that management has high levels of trust in employees (Walton 1985), enhancing the likelihood that employees will remain committed to the organization, so conversely emphasis on compliance systems creates a low trust work

environment, which may lead employees to reduce commitment and increase their propensity to quit.

Hypothesis 3: Employee compliance mechanisms (electronic monitoring, strict work rules) will increase voluntary turnover (quit rates).

Employee Compliance Mechanisms and Other Workplace Behaviors

We would expect to see similar consequences of employee compliance mechanisms for other workplace behaviors. Much as stronger employee voice mechanisms may lead to reduced incidence of withdrawal behaviors such as absenteeism, so conversely are stronger compliance mechanisms likely to lead to greater desire of employees to engage in absenteeism and other withdrawal behaviors. One caution to note, however, is that while employees may have a greater desire to engage in withdrawal behaviors, the ability to actually engage in the specific behavior of absenteeism may be reduced to the degree that the compliance mechanism includes monitoring and control of absenteeism itself. As a result of these opposing effects, it is an empirical question whether the increased control over absenteeism outweighs the increased desire to engage in absenteeism because of the presence of the compliance mechanism. With other workplace behaviors, in particular those captured by discipline and dismissal rates, the direction of the effect is likely to be less ambiguous. Extensive use of employee compliance mechanisms may result in more employees being punished by discipline and dismissal than would otherwise be the case, as well as more incidences of employees engaging in these types of behaviors in reaction to their dissatisfaction with the overall low trust, low commitment climate in the workplace.

Hypothesis 4: Employee compliance mechanisms (electronic monitoring, strict work rules) will increase rates of withdrawal behavior (absenteeism) and employer disciplinary action (discipline, dismissals).

The Mediating Effect of Workplace Behaviors on Voluntary Turnover

So far, we have discussed the impact of employee voice and compliance mechanisms on quit rates and other workplace behaviors separately. However, it is plausible that there is a relationship among absenteeism, discipline, dismissals, and quit rates. To the degree that employment relations in the workplace operates as a system, greater stresses or conflict in one part of the system are likely to produce similar reactions in other parts of the system. One theoretical framework suggesting this type of relationship is the workplace industrial relations systems model proposed in the 1980's by Katz, Kochan and colleagues (Katz, Kochan and Weber 1985; Kochan, Katz, and McKersie 1986). This model described workplace industrial relations as incorporating three generic features: work organization and rules; conflict management and due process; and individual attitudes and behaviors. In the model, these three features of the industrial relations system are seen as interrelated and their collective performance as affecting overall organizational performance. Empirical evidence supporting this model was found in studies comparing workplace industrial relations and organizational performance across unionized plants in the automobile industry (Katz, Kochan and Weber 1985). A key finding from this research relating to conflict management in unionized workplaces was the association between high levels of workplace conflict and other detrimental workplace outcomes. In particular, associations were found between high grievance rates and increased absenteeism and discipline rates and poor employee attitudes (Katz, Kochan and Weber 1985). Similarly, research at the individual employee level has found strong associations between employee use of grievance procedures and employee intent to quit and subsequent turnover (Lewin and Boroff 1996; Boroff and Lewin 1997; Lewin and Peterson 1999).

Extending this model of employment relations systems, we would expect to see a similar relationship between quit rates and withdrawal behaviors, such as employee absenteeism, and employer disciplinary actions and dismissals. The employee experience of the overall employment relations climate will be influenced by the degree to which it involves high or low

levels of conflict. High rates of absenteeism, discipline, and dismissal are indicators of conflict at work and may lead employees to view the general relationship between management and employees as a poor one and to view the workplace overall in a negative light. This in turn may lead to greater voluntary turnover. So employee voice and compliance mechanisms could have both a direct effect on quit rates and an indirect effect through either raising or lowering levels of as absenteeism, discipline, and dismissals. In sum, these workplace behaviors may partly mediate the relationship between employee voice and compliance mechanisms and quit rates.

Hypothesis 5: Employee absenteeism and employer disciplinary actions and dismissals will mediate the relationships between employee voice and compliance mechanisms, on the one hand, and quit rates, on the other.

Methods

Sample

The data for this study come from a 2003 survey of establishments in the telecommunications industry. To ensure representativeness, the sample was stratified by size, SIC code, and state location. The telephone survey was administered by a university-based survey research institute to the senior manager at each establishment; it took 52 minutes on average and yielded a response rate of 68 percent. After exclusions for missing data on the variables of interest, the sample used for this analysis is 349 establishments.

Consistent with the suggestion of Becker and Gerhart (1996: 792), we analyzed establishments within a single industry to enhance comparability and reduce extraneous sources of variation and measurement error. In addition, to reduce the problem of human resource practices varying across occupation groups within large organizations, we focused on the “core” workforce of the establishment, defined as the largest group of nonmanagerial employees who perform the primary work function of the establishment. In this industry, the core workforce generally consists of either customer service workers or technicians. Since the data were gathered from a large, nationally representative sample of establishments, it was not

feasible to survey multiple respondents at each site. However, Gerhart, Wright, McMahan, and Snell (2000) note that establishment-level surveys are generally more reliable than corporate-level surveys since the numbers of employees involved are much smaller and the managers responding generally have a very high level of familiarity with the work and employment practices that they are responsible for implementing. The average workforce size of establishments in our survey is 170 employees.

Measures

Dependent variables. Four dependent variables provide indicators of different aspects of employee and manager behavior at work. The *absenteeism rate* is measured by the average percentage of workers who were absent from work on 'a normal day' in the past year, including all types of absences, but excluding holidays and vacations. The *discipline rate* is the percentage of workers with a formal disciplinary action recorded against them in the past year. The *dismissal rate* is the percentage of workers dismissed in the past year, not including workers who were laid-off, promoted, or retired or quit voluntarily. The *quit rate* is measured by the percentage of workers who quit voluntarily in the past year, not including workers who took voluntary retirement or buy-outs.

Employee voice and compliance mechanisms. Employee voice is measured by four variables capturing different types of voice mechanisms in the workplace. *Union* presence at the worksite is measured by a simple dichotomous variable (1=yes, 0=no) indicating whether or not the core workforce was unionized (the bargaining units in the industry are defined such that the entire core workforce is either all unionized or all nonunion). The presence of *problem-solving groups* in the establishment is measured as the percentage of workers involved in off-line groups that periodically meet with supervisors or managers to discuss work-related issues. *Self-directed teams* are defined as the percentage of workers organized into self-managed teams. The incidence of *nonunion grievance procedures* is captured by an index representing the type of decision-makers used in the procedure, which was coded: 0=no procedure; 1=single

manager; 2=panel of managers; 3=nonmanagers (a peer review panel, mediation, or arbitration). Use of an index to capture procedure structure is a simplified version of an approach used in past research on nonunion dispute resolution procedures (e.g. Feuille and Chachere 1995).

Two variables were used to indicate the extent of employee compliance mechanisms in the workplace. As noted above, electronic monitoring is a widely used mechanism for controlling the work process and performance in both customer service and technical operations in the telecommunications industry. *Electronic monitoring* is measured as the percentage of work time that the typical employee is electronically monitored each day. A more traditional method of exerting control over the workforce is the adoption and enforcement of strict rules governing employee behavior. The existence of *strict rules* in the workplace is measured by averaging the responses to two Likert-type questions (1=strongly disagree through 5=strongly agree) asking the likelihood of a worker being dismissed for poor attendance and for failure to reach work goals.

Control variables. We included in the analysis several measures of related human resource practices as controls. Employment security was captured by the percentage of the core workforce that was *full-time permanent employees*, as opposed to part-time or temporary. Use of incentive pay (*variable pay*), is defined as the percentage of annual earnings of the typical core worker that is based on individual plus group incentives. Use of *internal promotion* or job ladders is measured by the percentage of the core workforce promoted to higher positions at the worksite or promoted or transferred to other positions in the larger organization. *Average pay* is measured as the average annual pay (in \$1000's) of the typical core worker.

We included several additional variables to control for relevant organizational and workforce characteristics. Organizational characteristics include: the establishment size, (measured by the number of employees) and whether it was a branch of a larger organization. Workforce characteristics include: whether the occupational group is call center workers (coded

1) or else technicians (coded 0); the percentage of the workforce that is female; and the average number of years of education of the typical worker at the site. The local unemployment rate is also included as a control for the effect of labor market conditions on worker decisions to quit or engage in some type of workplace misconduct.

Results

Table 1
Means, S.D., and Correlations for Variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1 Quit rate	7.42	13.26	1																		
2 Absentee rate	4.11	5.41	0.04	1																	
3 Discipline rate	13.08	19.56	0.17	0.10	1																
4 Dismissal rate	5.87	9.80	0.51	0.16	0.27	1															
5 Establishment size	1.70	5.42	0.01	0.15	0.01	0.02	1														
6 Part of larger organization	0.80	0.40	0.07	0.11	0.05	0.05	0.10	1													
7 Call center workers	0.48	0.50	0.23	0.09	0.15	0.25	0.09	-0.05	1												
8 Percentage female	38.13	36.44	0.16	0.07	0.08	0.10	0.10	-0.04	0.66	1											
9 Average education	13.27	1.52	-0.04	-0.02	-0.17	-0.06	-0.11	-0.18	0.03	-0.10	1										
10 Unemployment	0.05	0.01	-0.03	-0.02	0.03	0.10	0.14	0.10	-0.03	-0.06	-0.04	1									
11 Full-time and permanent	92.86	13.08	-0.24	-0.13	-0.13	-0.14	0.02	0.04	-0.06	-0.07	0.06	0.00	1								
12 Variable pay	14.79	25.81	0.24	0.02	0.04	0.21	0.00	0.00	0.16	0.02	0.19	0.01	-0.04	1							
13 Internal promotion	29.47	31.85	-0.18	-0.01	-0.12	-0.21	0.00	0.08	-0.16	-0.14	0.07	-0.11	0.08	0.01	1						
14 Average pay	40.26	17.43	-0.18	0.04	-0.18	-0.10	0.02	0.00	-0.16	-0.29	0.53	0.12	0.24	0.18	0.05	1					
15 Electronic monitoring	38.93	40.90	0.01	0.05	0.17	0.05	0.10	0.10	0.08	0.06	-0.20	0.00	-0.01	0.04	-0.05	-0.10	1				
16 Strict rules	3.89	0.97	0.17	-0.06	0.02	0.20	-0.03	0.03	0.15	0.06	0.11	-0.04	-0.15	0.08	0.07	-0.08	-0.04	1			
17 Unions	0.28	0.45	-0.26	0.04	-0.05	-0.23	0.13	0.22	-0.27	-0.15	-0.22	0.11	0.21	-0.15	0.10	0.13	0.26	-0.22	1		
18 Problem-solving groups	41.23	41.23	-0.08	-0.02	-0.05	-0.12	-0.08	-0.11	0.08	0.04	0.17	-0.08	0.08	0.05	0.09	0.10	-0.11	0.07	-0.20	1	
19 Self-directed teams	24.34	39.06	-0.01	-0.08	-0.14	-0.07	-0.08	-0.22	0.02	-0.05	0.20	-0.09	0.02	0.07	0.00	0.11	-0.03	-0.08	-0.17	0.33	1
20 Nonunion grievance procedures	0.74	0.89	0.16	0.00	-0.05	0.09	-0.07	-0.21	0.15	0.10	0.20	-0.03	-0.13	0.01	-0.01	-0.07	-0.07	0.13	-0.52	0.16	0.17

For all correlations greater than .10, p<.05; for all correlations greater than .08, p<.10

Table 2
Absenteeism, Discipline, Dismissals, and Quits as Functions of
Employee Compliance and Voice Mechanisms

Variable	Absentee rate	Discipline rate	Dismissal rate	Quit rate (Model 1)	Quit rate (Model 2)
Organizational features					
Establishment size	0.133 *	-0.157	0.084	0.107	0.127
Pt. of larger organization	2.157 *	1.876	2.553	7.380 **	6.002 *
Call center workers	1.439	5.766 +	5.566 *	6.431 *	2.992
Percentage female	0.003	-0.035	-0.045	-0.006	0.022
Average education	-0.063	-1.847 +	-1.089	-0.758	-0.274
Unemployment	-40.240 +	32.982	71.244	-82.204	-134.044 +
HR practices					
Percentage full-time, permanent	-0.091 ***	-0.167 +	-0.035	-0.194 *	-0.184
Variable pay	0.000	0.030	0.113 ***	0.169 ***	0.115 **
Internal promotion	-0.001	-0.027	-0.064 *	-0.078 *	-0.036
Average pay	0.034	-0.163 +	-0.067	-0.176 *	-0.150 *
Employee compliance					
Electronic monitoring	0.002	0.088 **	0.014	-0.031	-0.037
Strict rules	-0.628 +	-0.660	2.853 ***	2.981 *	1.389
Employee voice					
Unions	1.410	-4.293	-4.960 *	-6.866 *	-2.828
Problem-solving groups	-0.003	-0.012	-0.074 ***	-0.059 *	-0.030
Self-directed teams	-0.020 *	-0.113 ***	-0.018	-0.009	-0.004
Nonunion grievance procedures	0.537	-2.280	0.603	2.089	2.218 +
Workplace behaviors					
Absentee rate					-0.244
Discipline rate					0.009
Dismissal rate					0.760 ***
Constant	12.781	57.675	7.352	22.890	19.307
Sample	349	349	349	349	349
Chi-square	40.620	61.160	98.710	107.760	159.490
Probability > Chisq	0.001	0.000	0.000	0.000	0.000

Unstandardized Tobit estimates are reported. + p<.10, * p<.05, **p<.01, ***p<.001.

Table 1 presents the means, standard deviations, and bivariate correlations for the variables. Table 2 presents the estimation equations for the four dependent variables, i.e. the absentee, discipline, dismissal, and quit rates. All four of these dependent variables are rates, which are bounded below at zero, i.e. negative values are impossible. The result of this lower bound of zero is to produce a censored distribution for these dependent variables, where only part of the normal distribution is observed. Ordinary least squares (OLS) estimates for censored distributions produce biased estimates. In order to correct for this problem and produce consistent estimates of the parameters, it is necessary to use a Tobit model for the estimation of censored distributions (Long 1997: 187-9). Use of a Tobit model introduces the complication in interpretation of effect sizes that coefficient estimates for the model represent changes in the latent variable y^* , rather than the censored variable y . For interpretation of effect sizes, the tobit coefficients need to be multiplied by the appropriate conversion factors to produce the change in the observed censored variable y (Long 1997).¹ All effect sizes reported here for the tobit coefficients are calculated for changes in the observed grievance rate based on this conversion.

The first three estimation equations in Table 2 report results for the three dependent variables measuring negative workplace behaviors: absenteeism, discipline, and dismissals. We predicted that employee voice mechanisms would be associated with lower rates of negative workplace behaviors (Hypothesis 2). The results provide some support for this hypothesis. Self-directed teams are associated with significantly lower absentee rates ($p < .05$) and lower discipline rates ($p < .001$). Compared to workplaces without teams, in workplaces where all core employees are organized into self-directed teams absenteeism rates are on average 1.4 percentage points lower and discipline rates are on average 7.6 percentage points lower. Problem-solving groups are associated with significantly lower

¹ For a tobit model with a lower limit, the formula for the total change in the observed variable y is $F(z)\beta$, where β is the unadjusted tobit coefficient and $F(z)$ is the cumulative density function for the probability of the observation

dismissal rates ($p < .001$). Compared to workplaces without problem-solving groups, in workplaces where all core employees are in problem-solving groups dismissal rates are on average 3.9 percentage points lower. Unions are also associated with significantly lower dismissal rates ($p < .05$). Compared to nonunion workplaces, in unionized workplaces dismissal rates are on average 2.6 percentage points lower. Of the four types of employee voice measured, only nonunion grievance procedures do not have any significant associations with lower rates of negative workplace behaviors.

By contrast, we hypothesized that employee compliance mechanisms would be associated with higher rates of withdrawal workplace behaviors (Hypothesis 4). The results provide some more mixed support for this hypothesis. Greater use of electronic monitoring is associated with significantly higher discipline rates ($p < .05$). Compared to workplaces without electronic monitoring, in workplaces where all employee work time is electronically monitored discipline rates are on average 5.9 percentage points higher. However, while stricter work rules are similarly associated with significantly higher dismissal rates ($p < .001$), stricter work rules also have a marginally significant association with lower absenteeism rates ($p < .10$), the opposite direction from the predicted effect. A one standard deviation increase in the strictness of work rules is associated on average with a 1.5 percentage point higher dismissal rate and a 0.4 percentage point lower absenteeism rate.

Two models are estimated for the quit rate dependent variable. The first model tests the direct effect of employee compliance and employee voice mechanisms on quit rates. We predicted that employee voice mechanisms would be associated with lower quit rates (Hypothesis 1). Supporting this hypothesis, unions are associated with significantly lower quit rates ($p < .05$). Compared to nonunion workplaces, quit rates for unionized workplaces are on average 3.4 percentage points lower. Similarly, problem-solving groups are associated with significantly lower quit rates ($p < .05$). Compared to workplaces without problem-solving

being uncensored (Long 1997: 209).

groups, in workplaces where all core employees are in problem-solving groups quit rates are on average 2.94 percentage points lower. By contrast, we hypothesized that employee compliance mechanisms would be related to higher quit rates (Hypothesis 3). The results provide some support for this hypothesis. Stricter work rules are associated with significantly higher quit rates ($p < .05$). A one standard deviation increase in the strictness of work rules is associated with a 1.4 percentage point average increase in quit rates.

In the second model estimated for the quit rate dependent variable, the three negative workplace behaviors are added to the equation to test for their mediation of the effects of the employee compliance and voice mechanisms (Hypothesis 5). To test for mediation, we follow the procedure outlined by Baron and Kenney (1986: 1176). Among the employee compliance and voice mechanisms, unions, problem-solving groups, and strict work rules are all significant predictors of both the dismissal rate and the quit rate (Model 1). In the presence of the dismissal rate (Model 2), however, the size and significance of unions, problem-solving groups and strict work rules are reduced and all three become non-significant. Thus dismissal rates partly mediate the relationships between unions and quit rates, problem-solving groups and quit rates, and strict work rules and quit rates.

Discussion And Conclusions

This study set out to examine the effect of employee voice and compliance mechanisms on quit rates and other workplace behaviors. The theoretical starting point for the analysis was the exit-voice framework, which predicts that stronger voice mechanisms in the workplace should lead to reduced employee exit behaviors, such as voluntary behavior (Hirschman 1970; Freeman and Medoff 1984). Although the predictions of exit-voice theory are relatively straightforward, it is less obvious whether different types of employment practices provide sufficiently strong voice mechanisms so as to exert a downward effect on exit behavior. The evidence examined here suggests that the effectiveness of voice mechanisms depends on the type of practice involved. The traditional voice mechanism of

unions produced significantly lower quit rates, even controlling for wages, as predicted by exit-voice theory. Employee participation in the form of problem-solving groups similarly produced lower quit rates, though participation in the form of self-directed teams did not produce significant effects. By contrast, the results did not support the proposition that nonunion grievance procedures provide a sufficiently strong voice mechanism to significantly lower quit rates.

The exit-voice framework can be extended from voluntary turnover to examine the impact of voice mechanisms on other workplace behaviors. The results presented here suggest that voice mechanisms can reduce levels of undesirable behaviors at work, but again the effect depends on the type of practices involved. The effects of voice mechanisms on dismissal rates closely paralleled those for quit rates, with both unions and problem-solving groups being associated with lower dismissal rates. We also found some evidence that voice mechanisms lower both discipline and absenteeism rates; however, for these behaviors it was self-directed teams that were significant. Taken together these results suggest that studies that examine the organizational impact of employee voice mechanisms only through their effect on voluntary turnover are likely to underestimate the overall positive impact of voice mechanisms in the workplace. If organizations are basing their decisions on whether or not to adopt voice mechanisms on a calculation of whether the benefits outweigh potential costs, then it is important to recognize that the economic benefits of reduced turnover, while substantial, may be only part of the overall savings from reduced levels of undesirable workplace behaviors.

Our analysis also extends the existing exit-voice framework by examining employee compliance mechanisms as well as voice mechanisms. Rather than remedying employee dissatisfaction through the provision of voice mechanisms, organizations may take an alternative approach of using compliance mechanisms to monitor and enforce standards of performance. While compliance mechanisms may be intended to enforce high performance

standards, they may have an unintended consequence of reducing levels of trust and commitment in the workplace, leading to higher levels of undesirable behaviors. We examined the effect of two types of employee compliance mechanisms, electronic monitoring and strict work rules, on quit rates and other workplace behaviors. The findings of higher quit and dismissal rates associated with strict rules and higher discipline rates associated with electronic monitoring support the proposition that employee compliance mechanisms have detrimental effects on workplace behavior. By contrast, strict rules were associated with lower absenteeism rates (but only at marginal levels of significance), suggesting that, at least for this practice, employee compliance mechanisms may be a plausible approach to reducing this type of withdrawal behavior. In this last instance, reduced ability to engage in absenteeism due to enforcement of strict work rules appears to outweigh any greater desire to engage in absenteeism because of tight compliance mechanisms in the workplace.

We have also argued for an inter-relationship amongst different aspects of workplace behavior. Taking a systems approach to workplace employment relations, we have argued that other types of negative workplace behavior may mediate the relationship between employee voice and compliance mechanisms, on the one hand, and quit rates on the other. Our results support an effect of dismissal rates in partly mediating the relationship between both employee voice and compliance mechanisms and quit rates.

It is also worth noting that we find quite similar patterns of relationships between the predictors of dismissal rates and of quit rates. While compliance mechanisms of strict work rules are associated with higher dismissals and quits, collective voice mechanisms of unions and problem-solving groups produce lower dismissals and quits. Human resource practices of variable pay and the use of internal promotion have the same pattern, with greater reliance on variable pay associated with higher dismissals and quits, and internal promotions associated with lower levels of each. These results contradict the received wisdom in organizational behavior and human resource studies that the antecedents of dismissals and

quits are distinct (e.g. Shaw et al. 1998; Delery et al. 2000). In our view, although there are undoubtedly important differences between the processes leading to voluntary and involuntary turnover, there are also strong linkages between these workplace behaviors because they are outcomes of an inter-related system of workplace employment relations.

The findings of this study indicate that methods of workplace governance are significantly associated with an important performance outcome: turnover. Collective voice systems that create formal mechanisms through which employees can influence organizational practices are significantly associated with reductions in turnover, whereas individual voice systems, in the form of nonunion grievance procedures, are not. Reliance on methods of organizational compliance and punishment are associated with higher levels of turnover.

There are several limitations to this study. The study was based on data collected from the telecommunications industry. Industries vary in the nature of work organization, skill and education requirements, and labor market conditions. Future research could valuably extend the work presented here by examining other industries and testing the generalizability of the findings. This study examined variation in practices at the workplace rather than the individual level. For future research, additional insight on the processes examined here could be obtained through analysis of multi-level data gathered at both the individual and workplace levels.

This study provides additional insight into and helps extend the exit-voice framework. One area where the exit-voice framework has needed extension is to relate voice mechanisms to other types of workplace behaviors beyond the classic example of voluntary turnover. Our analysis supports the extension of the framework to include the impact of voice mechanisms on other undesirable workplace behaviors, including absenteeism, discipline and dismissals. We also extend the exit-voice framework here by linking it to the framework of workplace employment relations systems, which emphasizes the inter-relationship among

different workplace practices and behaviors. This suggests a more complex set of employee behavioral responses to the adoption of different organizational work and employment practices. For organizations, this indicates both the potential for enhanced gains from the introduction of voice mechanisms, but also a note of caution. The caution for organizations comes from our analysis of employee compliance mechanisms. Although compliance mechanisms have received less attention in the literature than voice mechanisms, our analysis indicates that they can have potentially negative effects on employee workplace behaviors. For organizations considering the adoption of more extensive employee compliance mechanisms to monitor and direct employee job performance, this suggests a reason for caution in that potential monitoring benefits may be undermined by the costs of increased levels of undesirable workplace behaviors.

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