THE POWER OF LABOR TO GRIEVE: THE IMPACT OF THE WORKPLACE, LABOR MARKET, AND POWER-DEPENDENCE ON EMPLOYEE GRIEVANCE FILING

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The authors examine a model of employee grievance activity that encompasses both workplace and labor market determinants and attempts to reconcile inconsistent findings in the literature by taking into account the possible moderating effects of labor power. A multi-level analysis of data from 1996–97 on 1,383 blue-collar workers suggests that labor market factors influenced grievance activity much less directly than workplace characteristics did, and that the nature of these influences was more complex than has previously been hypothesized. Specifically, consistent with power-dependence theory, the authors find that the direct effects of at least one labor market factor, the wage premium, were likely to be contingent on labor power, and that the labor market itself may have moderated the effects of certain workplace factors on employee grievance filing in a manner consistent with efficiency wage theory.

Over the past half-century, numerous studies have examined a broad range of possible antecedents of grievance filing, from employee characteristics (Gordon and Miller 1984) and workplace factors (Bemmels and Foley 1996) to broader contextual factors such as the labor market environment (Ichniowski 1992; Cappelli and Chauvin 1993). Yet, as Feuille and Hildebrand (1995:346) concluded in a re-

cent review, "It is very difficult to synthesize a specific explanation for grievance-filing behavior from this research, for the use of non-comparable variables and work sites across this research severely limits generalizability." Specifically, research has yielded divergent results regarding the possible antecedents of grievance filing (for example, Labig and Greer 1988; Feuille and Hildebrand 1993) and, in particular,

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A data appendix with additional results and copies of the computer programs used to generate results presented in the paper are available from Peter Bamberger (e-mail: peterb@tx.technion.ac.il).

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regarding the relative role played by workplace factors on the one hand, and broader contextual factors, such as labor market conditions, on the other. From a theoretical perspective, such discrepancies are interesting because they suggest that the predictive utility of labor market antecedents in general, and efficiency wage theory in particular, may be contingent on some other, yet-to-be-identified, moderating factor. From a practical perspective, these findings are interesting to both labor and management, because of their vested interest in better understanding the conditions under which employee grievances may be influenced by factors largely out of their direct control, such as labor market condi-

Consequently, in the current study, taking into account some of the methodological drawbacks of previous studies, we examine the predictive utility of work context and labor market antecedents of employee grievance filing. Specifically, drawing from Hirschman's (1970) Exit, Voice and Loyalty paradigm and building on Klaas's (1989) expectancy model of grievance behavior, we generate an integrative model of employee grievance filing that incorporates both work context and labor market factors, and, most important, that also takes into account the potential moderating role of labor power. We then test this model using individual- and unit-level data on members of multiple unions operating in a diverse set of labor markets.

Grievance Filing: An Individual, Group, or Enterprise-Level Phenomenon?

A number of studies have suggested that grievance procedures, by offering employees an alternative to "exit" behaviors, result in lower rates of turnover, and thus lower staffing and training costs (Freeman and Medoff 1984; Rees 1991). More recently, Baron and Kreps (2000:131) argued that such voicing options enhance the efficiency of employment relationships by offering a solution to the problem of employee reluctance to respond to managerial caprice.

Given such findings, it comes as no surprise that a grievance procedure is a core element of nearly every collective agreement in the United States, and has become increasingly prevalent as a mechanism of dispute resolution in non-union settings as well (Feuille and Hildebrand 1995). Nevertheless, grievances are far from cost-free for either labor or management. Although most grievances are resolved without the involvement of costly arbitrators, there are still substantial productivity and time-related costs for both labor and management (Feuille and Hildebrand 1995; Ichniowski 1986). Consequently, from a practical perspective, it is in the interest of both labor and management to better understand those work- and context-based factors that may cause employees to file grievances.

In a unionized work context, a grievance is initiated when an employee formally files a complaint with an agent of the union and alleges that his rights have been violated (Gordon and Miller 1984:118). Although grievances are filed by individual employees, the majority of recent studies have examined grievance activity at the aggregate level, focusing on the rates of grievances handled by stewards across organizations or organizational units. Indeed, Bemmels and Foley (1996:364) reported that since 1985, only three empirical studies have examined individual-level employee grievance filing behavior.

To a certain extent, researchers' lack of interest in individual-level studies of employee grievance filing may be due to the inherent limitations of such studies in terms of reliability and validity, as Gordon and Miller (1984) suggested. For example, because there is a relatively low base rate of employee grievance filing in many firms, unless researchers use a longer period of time to accumulate each subject's grievances, reliability is likely to suffer. Yet Gordon and Miller suggested that aggregate, unit-level grievance rates provided by union agents may be even more subject to bias, since some grievances filed by employees are not subsequently pursued through formal grievance procedures, and consequently are not included in aggregate grievance rates. For example, the steward's decision about how to pursue an employee-filed grievance may be greatly influenced by immediate bargaining interests (Kleiner, Nickelsburg, and Pilarski 1989).

The potential for such bias may explain why numerous studies have found that individual-level employee complaint and grievance filing tends to be a better predictor of grievance rates at the enterprise and group levels than are the characteristics of either the workplace or the actors involved (Bemmels 1994:285). These findings suggest that although employee, workplace, and labor market characteristics may have an impact on grievance rates at the unit or firm level, this impact is largely indirect, operating primarily by means of their effects on individual grievance filing. Given that individual employee grievance filing appears to provide the primary causal explanation for the impact of workplace, employee, and labor market characteristics on grievance rates at the unit or firm levels, it makes little sense to test for the impact of such factors at the unit or firm level. Consequently, in the current study, we focus on individual employee grievance activity and its antecedents.

Employee, Workplace, and Market-Based Determinants of Employee Grievance Filing

In attempting to explain grievance filing behavior, researchers have generally focused on three major groups of possible antecedents: employee characteristics, workplace or managerial factors, and, albeit to a far lesser extent, environmental contingencies (Labig and Greer 1988; Bemmels and Foley 1996).

Employee characteristics. Much of the early research on employee grievance filing attempted to identify the demographic characteristics of those using the grievance system. Descriptive rather than theory-based, the bulk of these studies simply tested the ability of one or more demographic variables to predict grievance filing. As a whole, these studies produced few consistent re-

sults (Gordon and Miller 1984). In fact, in his review, Kissler (1977) pointed out that the individual correlates of individual grievance activity appear to be largely situation-specific.

Yet, because certain demographic factors (such as age, gender, job experience, and skill level) may be associated with greater or fewer job alternatives, it is entirely possible that such differences may affect individuals' interest in filing a grievance (they may, for example, simply prefer to change jobs) or willingness to expose themselves to some of the risks potentially inherent in filing a grievance in some firms. Furthermore, since demographic factors may influence employees' analysis of workplace or environmental conditions, these factors may also determine the extent to which these conditions are perceived as grievance opportunities (Klaas 1989:447). Finally, skill differences may be the cause of inter-industry variation in the tendency to file grievances (Lewin and Peterson 1988). Consequently, in the current study, we do not posit specific relations between employee characteristics and employee grievance filing, but we do control for employee demographic characteristics in assessing how workplace and environmental factors affect employee grievance filing.

Work context. Research has shown that among the many work-related issues that may influence grievance activity, supervision and job conditions tend to be the most frequently grieved across multiple sectors (Lewin and Peterson 1988:143). A basic premise of the studies examining the impact of both supervision and job conditions on grievance filing is that aversive supervision and job characteristics, which present employees with grievance opportunities, should be linked to an increase in grievances. According to Klaas's expectancy model of grievance behavior (1989), employees must first perceive grievance opportunities before they can even consider the potential benefits and costs of filing a grievance. That is, Klaas's model suggests that the perceived existence of aversive supervisory or job conditions is a necessary (though not sufficient) condition for grievance filing. While this would appear on the surface to be a relatively simple proposition to operationalize, in reality it is complex, and studies of the link between work context and employee grievances have yielded, at best, only mixed results.

Researchers concerned with the impact of supervision on employee grievances have tended to focus on two main types of indicators: supervisor capabilities and leadership style (Bemmels and Foley 1996). A relatively strong and consistent inverse relationship has been found between supervisory capabilities and grievances. For example, Allen and Keaveny (1985) found that, relative to grievants, non-grievants held significantly more favorable attitudes about the competence of their supervisors (specifically, believed that their supervisors were "competent in doing their job"). Similarly, focusing on steward perceptions of supervision, Bemmels, Reshef, and Stratton-Devine (1991) and Bemmels (1994) found that higher perceived supervisor capabilities (and, in particular, better knowledge of the collective bargaining agreement) were linked to lower frequencies of employee complaints to stewards and lower grievance rates. Although some of the research on supervisory qualifications is somewhat dated, given recent changes in the nature of the supervisory role (in particular, requirements for supervisors to serve less as monitors and more as coaches and mentors), we can only expect this variable to have an increasing impact on employee grievance behavior.

The findings on leadership style and grievance behavior have been less consistent, however. Using Fleishman and Harris's (1957) measures of supervisory consideration (emphasis on trust and respect) and structuring (task-related directiveness), early studies (Fleishman and Harris 1962; Skinner 1969) suggested that both consideration and structure had a curvilinear relationship with grievance rates. Thus, for example, Skinner's findings suggested that subordinates of foremen rated in the middle of the structure range filed the most grievances. However,

more recent studies have found structure to be unrelated to grievance activity (Bemmels et al. 1991; Bemmels 1994) and consideration (or a more democratic leadership style) to be significantly associated with *more* grievances (Walker and Robinson 1977).

To a large extent, these inconsistent findings may be attributed to methodological problems (Labig and Greer 1988). For example, relying on post-hoc employee selfreports of perceived supervisory behavior may introduce same-source bias and may also make it difficult to ascertain the causal nature of any association with employee grievance behavior (see, for example, Allen and Keaveny 1985). The mixed results may also be due to the context-specific implications of leadership style (House and Podsakoff 1994). Indeed, in some contexts, employees may not see structuring behaviors as aversive or consideration behaviors as positive. Particularly under conditions of high organizational ambiguity, employees may find supervisors' structuring behaviors to be beneficial (Bacharach and Bamberger 1995). Consequently, in the current study, we attempt to model the effects of supervision on employee grievance filing by (a) focusing on unit-level (as opposed to individual-level) measures of supervisory behavior, and (b) focusing on indicators of supervisory behavior that are more universally perceived to be aversive, such as the degree to which supervisors are perceived as intimidating, arrogant, or impatient (Tepper 2000).

Far less grievance activity research has examined the impact of job conditions than the impact of supervision. Researchers concerned with job conditions have concentrated primarily on work technology variables (Kuhn 1961; Peach and Livernash 1974), such as the need to follow strict schedules and procedures, routinization, and task interdependence (Bemmels et al. 1991). There again the results have been, at best, mixed. For example, Bemmels et al. (1991) found essentially no support for the presumed relationship between work technology and grievance activity. In fact, out of six technology variables studied, only

one, the need to follow strict schedules and procedures, was related to grievance rates, and this in the opposite direction from that predicted. However, as with leadership style, the degree to which work process configurations present grievance opportunities may be situation-specific. In certain work contexts, a high degree of monitoring and formalization may, for example, reduce the risk of work injuries and therefore reduce grievance activity. In other contexts, employees may view similar technologies as an instrument of excessive managerial control and may resist them via the grievance system.

Consequently, as with supervision, we focus on the impact of unit-level job attributes that are universally perceived to be aversive, namely an unsafe work environment (exposure to occupational hazards) and excessive work hours (temporal job demands). The latter is of particular relevance in light of recent changes in the nature of work (Frese 2000). Specifically, many employers have recently sought to lower labor costs by reducing staffing levels and increasing the flexibility of their remaining work force, thus placing increased temporal demands (manifested by increased hours of work and increased pressure to work overtime) on their employees (Schor 1992; Bamberger and Meshulam 2000). Such increased temporal job demands have been associated with a wide range of negative consequences for employees and their families, including stress and burnout (Zohar 1997; Reynolds 1997), work-family conflict (Moen and Yu 2000), and physical health complaints (Shirom, Westman, Shamai, and Carel 1997).

Aversive job and supervisory attributes are likely to increase the odds of employee grievance filing for a number of reasons. First, the odds of grievance filing are likely to rise if these attributes reflect actual contract violations by management and if employees turn to the grievance system in order to seek redress. Second, because employees may use the grievance system as a means of expressing their dissatisfaction with management, the odds of grievance filing may rise even if these attributes merely

reflect unit members' concerns with supervision or working conditions. This is not to say, however, that aversive supervisory or job-related attributes *necessarily* increase the odds of employee grievance filing. As noted above, while the presence of aversive attributes is likely to increase the perception of a grievance opportunity, the decision to exercise this opportunity will likely depend on the outcome of "a rational, calculative process" in which the employee will weigh the attractiveness of initiating the grievance against the relative attractiveness of alternative forms of action or inaction (Klaas 1989:451). Nevertheless, since, according to Klaas, employees do not even consider initiating a grievance unless they perceive a grievance opportunity, the expectancy model suggests the following hypothesis:

Hypothesis 1. The more an individual's work unit is generally viewed as having aversive supervisory or job attributes, the greater the likelihood of employee grievance filing.

Market-based determinants. Still, according to the expectancy perspective developed by Klaas, while the intra-organizational work context may be necessary to drive grievance behavior, it may not always be sufficient. Consequently, it is entirely possible that grievance filing can be better explained by factors external to the firm, particularly those related to market forces. Specifically, as suggested by Klaas, employees rarely file a grievance on impulse as soon as a grievance opportunity is perceived to exist. Rather, the decision to initiate a grievance typically involves a process in which the employee considers the costs and benefits of filing the grievance relative to the costs and benefits associated with other potential avenues of recourse. These other potential avenues include what Hirschman (1970) referred to as "exit" (withdrawal) and "loyalty" (or "suffering in silence"). For example, rather than "voicing" a complaint by means of a grievance, employees may find it more worthwhile to reduce or completely withdraw their own "inputs." However, the outcome of this analysis is by no means certain. In fact, depending on one's assumptions, two competing hypotheses may be generated.

The first hypothesis is grounded on the assumption that "grievants are protected from reprisals from management and that the administrative costs of presenting the grievance are borne by the union" (Cappelli and Chauvin 1991:5). Assuming the costs of grievance filing to be relatively fixed at close to nil, the decision to file a grievance becomes contingent on the relative utility of the withdrawal alternative. As noted by Cappelli and Chauvin, the relative benefit of withdrawal is itself a function of at least two market-related factors: the availability of alternative jobs, and how much of a wage premium the employee currently receives over such alternative jobs. The result is that labor market factors, by influencing the overall utility of either shirking or quitting as key alternatives to grievance filing, should have a direct impact on the level of employee grievance filing. Specifically, consistent with efficiency wage theory, Cappelli and Chauvin suggested that higher wage premiums lower the relative cost of using the grievance system by raising the costs associated with the alternatives (1991:6). Similarly, they posited that the relative cost of filing a grievance, as opposed to either shirking (which may put one's job at risk) or quitting, declines as the rate of unemployment increases. Indeed, in their analysis of grievance rate data from 86 plants of a single manufacturer, Cappelli and Chauvin found strong support for their model, with both the wage premium and unemployment associated with lower grievance rates. On the basis of these findings, we propose the following:

Hypothesis 2a. The likelihood of employee grievance filing will be positively associated with the unemployment rate in an individual's area.

Hypothesis 2b. The likelihood of employee grievance filing will be positively associated with the individual's wage premium.

However, can we really assume that all of the costs of grievance filing are borne by the union? Even Cappelli and Chauvin (1991:5) acknowledged that employees may bear "important psychological costs in the

form of confronting one's supervisors, being cross-examined as part of the proceedings, waiting months or longer for the grievance to be resolved, and so on.' Moreover, regardless of contractual assurances, in many cases employees may fear that filing a grievance will expose them personally to the risk of some form of managerial reprisal that will make it difficult for them to remain on the job.1 Lewin and Peterson's (1988) findings that relative to employees who do not file grievances, those who do are more likely to suffer supervisory reprisal in the form of lower performance ratings and promotion rates—suggest that such fears are well based. If employees are assumed to bear at least some of the psychological cost of filing a grievance, it is entirely possible that the same labor market conditions specified above might have precisely the opposite effects on individual grievance behavior. Specifically, compensating differentials theory (Brown 1980) suggests that employees may be more willing to adopt a "loyalty" strategy (Hirschman 1970) and "suffer in silence" as wage premiums rise. Indeed, Lewin and Boroff's (1994) findings suggest that the odds of employee grievance filing were lower among those with a higher sense of attachment to the employer. Moreover, if employees fear that managerial reprisal may include actions making it difficult for the grievant to remain on the job, the subjective expected cost of filing the grievance is likely to be influenced by the relative cost of job disengagement. Since the relative cost of such disengagement rises as a function of regional unemployment, we may posit that as the unemployment rate rises, employees will become less willing to risk being pushed out of their job by managerial

¹Cappelli and Chauvin noted that such potential costs are relatively fixed when unit-level grievance rates are considered on an intra-firm basis (1991:5), thus allowing for a relatively "clean" examination of labor market effects on grievance rates.

retaliation for grievance filing. Such a notion would help explain Lewin and Peterson's (1988) finding that average grievance rates fell in three of the four industries they examined during the 1980–82 period, which coincided with the emergence of a severe recession. Consequently, as an alternative to the efficiency model hypothesis noted above, we hypothesize the following:

Hypothesis 2c. The likelihood of employee grievance filing will be inversely associated with the unemployment rate in an individual's area.

Hypothesis 2d. The likelihood of employee grievance filing will be inversely associated with the individual's wage premium.

Extending the Efficiency Model: A Power-Dependence Perspective

Implicit in the above hypotheses about the impact of the economic context on grievance activity is the notion of powerdependence (Bacharach and Lawler 1981). According to power-dependence theory, power is a relative phenomenon: Party A's power is a function of A's dependence on Party B, relative to B's dependence on A. A's dependence on B is perceived to increase when A has few alternatives to B's input into the exchange, and when B's input into the exchange is perceived as having a higher value. In the case of grievance behavior, Cappelli and Chauvin's model may be viewed as using the unemployment rate as a proxy for the availability of employment alternatives, and the wage premium as a proxy for the value of the job for the employee. In power-dependence terms, the efficiency model suggests that as employee dependence on the employer increases, so do the potential costs of exiting, and thus the likelihood that employees will file grievances to deal with workplace problems.

Missing from this model, however, is any reference to the possible impact on grievance activity of the employer's dependence on the employee, or more precisely, of the employer's dependence as it is *perceived* by the employee. Such perceived employer

dependence (or what Bacharach and Lawler [1981:66] called labor power) shapes employees' perceptions of the risks of grievance filing: the higher the labor power, the lower the perceived risk of managerial retaliation, and thus the more likely it is that employees will file grievances if presented with a grievance opportunity. Labor power thus may moderate the impact of labor market conditions on individual grievance filing.

Efficiency wage theory posits that rising wage premiums and unemployment rates, by reducing the relative costs of grievance filing, are positively associated with grievance rates. What is the effect of labor power on this positive association? For employees with high labor power, who are little concerned with the risk of managerial retaliation after grievance filing, the relative costs of grievance filing are likely to be low. Compared to employees with low labor power, they will thus be more likely to respond to grievance opportunities by voicing and less likely to respond by exiting. In contrast, under conditions of low labor power, the generally positive effect of rising wage premiums and unemployment rates on grievance rates may be significantly reduced. For employees with low labor power, even if wage premiums and unemployment rise, the perceived risk that grievance filing will provoke managerial retaliation may begin to outweigh the possible benefits, thus resulting in a weaker association between these labor market factors and individual grievance filing. As wage premiums and unemployment rise, lower-power employees may have an increasing incentive to exercise loyalty or, in other words, "suffer in silence," using the rationale that increasing wage premiums provide a kind of compensating differential for their silent suffering. Consequently, using the wage premium as a measure of job value, unemployment as a measure of job alternatives, and perceived employer dependence on the employee as a measure of labor power, we propose the following:

Hypothesis 3a. Labor power moderates the relationship between job value (that is, the wage

premium) and employee grievance filing such that the higher the labor power, the stronger the relationship between job value and grievance filing.

Hypothesis 3b. Labor power moderates the relationship between job alternatives (that is, unemployment) and employee grievance filing such that the higher the labor power, the stronger the relationship between job alternatives and grievance filing.

Methods

Sample

In order to test the hypotheses specified above, we analyzed self-report data from members of six blue-collar unions in the manufacturing, service, and construction sectors, who were employed on a full-time basis and earning at least \$5.00 per hour. In the case of the manufacturing and service workers, we collected data from a random sample of members employed at each of the plants or facilities represented by the particular union. In the case of the construction unions, we collected data from a random sample of each union's general membership. In all six cases, the unions had signed contracts at least one year prior to the study and were at least one year away from future contract negotiations.² In addition, all the members of a particular union were covered by the same contract. All the unions included in the current study had broadly defined grievance procedures. For example, a provision appearing in the contracts of two of the unions guaranteed employees the right to grieve all matters "in connection with their work."3 Finally, all surveys were distributed and returned within a single eightmonth period in 1996–97.

Across these six unions, 5,026 surveys were distributed and 2.432 were returned. for an overall response rate of 48.4%. The effective sample size was reduced to 2,314 by the exclusion of 8 grossly incomplete questionnaires, the disqualification of 19 respondents earning less than \$5.00 an hour, and the omission of an additional 91 respondents employed on less than a fulltime basis (defined as a minimum of 35 hours per week). Because of the need to run cross-model comparisons, we conducted a list-wise deletion of all observations for which there were missing data on one or more of the explanatory variables. This resulted in the elimination of an additional 931 individuals and a final sample size of 1,383.4 537 respondents, employed in 24 work units, were members of the two unions in the industrial sector: 384 respondents, employed in 30 units, were members of the two unions in the service sector; and 462 respondents, employed in 14 units (work sites), were members of the two unions in the construction sector. The mean number of observations per work unit was 20 (median = 10 observations/ unit). In approximately 90% of the work units there were four or more observations, and in no case were there fewer than 3 observations per work unit. The tasks performed by members of a common work unit were in all cases either identical or nearly identical.

In each of the unions, we checked for a possible non-response bias, and found that, as reported elsewhere (Bacharach and Bamberger, forthcoming), our final samples were representative of the membership of their respective unions across a wide range of criteria (for example, seniority, skill level, and hours of work). Specifically, grievance

²This is important because it is generally believed that grievance activity intensifies as contract renewal dates and negotiations approach or occur.

³The complete contract language is available from the authors. Similar language appeared in the contracts of the remaining four unions.

⁴The list-wise elimination of these observations had no impact on the results reported below. All statistically significant parameters remained statistically significant, with no change in the nature or magnitude of association, and all non-statistically significant parameters remained non-statistically significant.

Table 1. Pearson, Biserial, and Polychoric Correlations among the Variables: Means and Standard Deviations.^a

	Grievance Filed	Age	Constr. Neg. Spv. Spvsr. Hours, Gender Seniority Unskilled Skilled Industry Behavior Qualif. Week	niority U	nskilled	Skilled	Constr. Industry	Constr. Neg. Spv. Spvsr. Hours/ Over- Exp. to Unempl. Wage industry Behavior Qualif. Week time Hazards Rate Prem.	Spvsr. Qualif.	Hours/ Week	Over- time	Exp. to Hazards	Unempl. Rate	Wage Prem. Power Mean S.D.	Power	Mean 3	3.D.
Grievance Filed	-															0.22	0.41
Age	-0.13*** 1.00	1.00														6.10	5.09
Gender	0.01	-0.06	1.00													0.33	0.47
Seniority	0.18***).18*** 0.31***	0.09***	1.00												3.34	1.78
Unskilled	0.40*** -0.17*	-0.17**	0.59*** 0.34***		1.00											0.54	0.50
Skilled	-0.51*** 0.18*	0.18**	-0.85*** -0.44*** -0.78***	0.44***		1.00										0.35	0.46
Construction Ind.	-0.27*** 0.17*	0.17***	-0.85*** -0.48*** -0.99***	0.48***		0.99*** 1.00	1.00									0.33	0.47
Neg. Spv. Behav. ^b	0.29***	0.29*** -0.10***	0.15*** 0.09*** 0.43*** -0.53*** -0.55***	***60.0	0.43*** -	0.53***	-0.55***	0.56								1.93	0.29
Spv. Qualifications ^b		0.07***	-0.29*** 0.07*** 0.06** -0.25*** -0.23*** 0.39*** 0.42*** -0.70*** 0.69** 0.49*** -0.70*** 0.69*	0.25*** _	0.23***	0.39***	0.42***	-0.70***	69.0							3.65	0.40
Avg. Hours/Weekb		-0.20***	0.21*** -0.20*** -0.30*** 0.02		0.17*** -	0.08**	-0.09***	0.17*** -0.08** -0.09*** 0.09*** -0.15*** 0.85	0.15***	0.85						3.60	0.71
Overtime Pressure ^b		-0.16***	-0.15*** -0.21*** -0.15*** 0.30*** 0.30*** 0.05	0.21*** _	0.15***	0.30***	0.30***		0.03	0.30***	1.00					1.53	0.30
Exp. to Hazards ^b	-0.07*	-0.06**	-0.69*** -0.54*** -0.50*** 0.85*** 0.66*** -0.05*	0.54***	0.50***	0.85***	0.66***	-0.05* -	0.11***	-0.11*** 0.14** 0.28*** 0.90	0.28	06.0				2.96	0.43
Unemp. Rate	-0.27***	0.25	$-0.27*** 0.25*** -0.09*** \\ -0.12*** 0.12*** 0.52*** 0.52*** 0.57*** \\ -0.39*** 0.30*** \\ -0.41*** 0.14*** 0.14*** 1.00** \\ -0.27*** 0.30*** 0.30*** \\ -0.41*** 0.14*** 0.14*** 1.00** \\ -0.41*** 0.14*** 0.14*** 0.14*** 0.14** \\ -0.41*** 0.14** 0.14** 0.14** 0.10** \\ -0.41*** 0.14** 0.14** 0.14** \\ -0.41** 0.14** 0.14** 0.14** 0.14** \\ -0.41** 0.14** 0.14** 0.14** 0.14** \\ -0.41** 0.14** 0.14** 0.14** 0.14** \\ -0.41** 0.14** 0.14** 0.14** 0.14** \\ -0.41** 0.14** 0.14** 0.14** 0.14** \\ -0.41** 0.14** 0.14** 0.14** 0.14** \\ -0.41** 0.14** 0.14** 0.14** 0.14** \\ -0.41** 0.14** 0.14** 0.14** 0.14** \\ -0.41** 0.14** 0.14** 0.14** 0.14** \\ -0.41** 0.14** 0.14** 0.14** 0.14** 0.14** \\ -0.41** 0.14** 0.$	0.12*** _	0.52***	0.52***	0.57***	-0.39***	0.30***	-0.41***	-0.24***	0.14***	1.00			6.19	1.95
Wage Premium	0.01	0.21***	-0.13*** 0.22*** -0.31***	0.22*** _	0.31***	0.15*** 0.05		-0.06**	**90.0	0.11***	0.05*	-0.03	-0.08***	1.00		0.30	0.41
Power	-0.36**	**90.0 ***96.0-	0.18***-0.12***-0.30*** $0.31***$ $0.29***-0.27***$ $0.22***-0.09*$	0.12***	0.30***	0.31***	0.29***	-0.27***	0.22***	-0.09*	0.03	-0.05	0.17***	*80.0	0.87	0.90	0.30

^aReliability statistic reported along the diagonal; Biserial reported for dichotomous-continuous dyad; Polychoric reported for dichotomous-dichotomous

dyad. ^bUnit-level. *Statistically significant at the .10 level; **at the .05 level; ***at the .01 level.

rates in each of the six union subsamples examined were nearly identical to those reported by their respective unions for the parallel period. In four out of six cases, the deviation was less than 10%. Only in the case of the two construction unions did the sample grievance rate diverge from the reported union-filing rate by greater than 10%, and in no case did the rates diverge by more than 20%. Our union liaisons attributed the divergence to the tendency of stewards in the construction unions to resolve most member-filed complaints informally. Consequently, many of the grievances filed by construction union members with their stewards never end up being recorded as having been formally filed by the union. Given that the bulk of our explanatory variables are assessed on the basis of unit-level measures (for example, hazards, temporal demands), independent reports (for example, unemployment), or reports that are likely to be common across members of the same cohort in a given bargaining unit (for example, the wage premium), the risk of a non-response bias is minimal. Women, nearly all of whom worked in the service and industrial sectors, comprised 33% of the sample. Only 2% of the respondents in construction were female, accurately reflecting the demographic composition of the two construction unions studied. Respondents ranged in age from 18 to 65, with a mean age of 46. More than 61% were married or living with a partner. Whites comprised 59% of respondents. Respondents were relatively well educated, with 94.6% having completed either high school or vocational school, and 11.3% having completed four or more years of college.

Measures

In addition to a measure of employee grievance filing, the present study includes seven measures of the work and environmental factors potentially influencing employee grievance behavior, as well as five control variables. These measures are presented below along with their respective reliability estimates. Except as otherwise

noted, all scales were formed on the basis of the arithmetic mean of their respective items. Variable mean values and standard deviations are presented in Table 1.

Employee grievance filing. Adopting an approach similar to that used by Allen and Keaveny (1985), we assessed employee grievance filing by asking respondents to indicate how many times they had filed a grievance in the last year. Study participants were instructed to include all written grievances filed with a steward or committeeperson, regardless of whether the steward or union had actually ended up pursuing the matter. We then dichotomized this response, with a value of 1 indicating that the individual filed one or more grievances during the past year, and 0 indicating that the individual had not filed even one grievance in that period. As can be seen in Table 1, 21.5% of the sample as a whole reported having filed at least one grievance during the preceding year. This rate of employee grievance filing is similar to Cappelli and Chauvin's (1991) finding of approximately 23 grievances per 100 workers, but greater than the 17% steward-reported grievance rate reported by Bemmels (1994) for his Canadian sample. Consistent with the data provided to us by the unions, the proportion of members who were grievance filers was significantly greater (Chi² = 81.79, p < .001) in the manufacturing and service unions (36%) than in the craft unions (17%).

Work context variables. In order to assess the unit-level work context, we aggregated individual responses from members of a common work unit, calculating the mean score of members of a common unit on each work context scale. Two scales developed by Bacharach and Bamberger (1995) were used to assess the nature of supervision. The first, negative supervisory behavior, included five items. Respondents were asked to indicate how frequently (1 = hardly ever to 5 = very often) their direct supervisor (a) becomes impatient, (b) loses his/her temper, (c) becomes arrogant, (d) assumes one is guilty until proven innocent,

and (e) becomes overly concerned with regulations. At the individual level, Cronbach's alpha for this measure was .90. The second scale, supervisory qualifications, included three items. Respondents were asked to indicate (1 = not at all to 5 = very much) the extent to which they felt that their direct supervisor had (a) the experience necessary for the job, (b) the education necessary for the job, and (c) the people skills necessary for the job. At the individual level, Cronbach's alpha for this measure was .87.

We assessed the aversiveness of the job by focusing on two core job attributes: exposure to occupational hazards, and temporal job demands. Exposure to occupational hazards was assessed on the basis of a 16item scale (alpha = .90) developed after extensive preliminary fieldwork. Specifically, prior to the construction of the questionnaire, we interviewed over 150 respondents from all six unions in order to generate a list of the most pervasive hazards at each work site. The 16-item instrument captures those sets of hazards most frequently mentioned (for example, fire or electrical shock, asbestos, slippery floors or catwalks, dangerous work methods, the danger of muggings en route to and from work). Respondents were asked to indicate the degree to which they felt exposed (1 =not at all exposed, 5 = very exposed) to each of the 16 hazards in their current job.

We assessed temporal job demands on the basis of two measures. First, we asked respondents to indicate on average how many hours they had worked per week over the preceding year. While approximately 32% of respondents had worked, on average, 40 or fewer hours per week, averages of 41–50 hours, 51–60 hours, and 61 or more hours were reported, respectively by about 40%, 20%, and 8%. However, because, for many workers, increased hours may offer the benefit of increased earnings and may consequently fail to serve as a basis for grievance filing, we measured temporal demands in terms of a second variable supervisory pressure to work overtime. Assuming that increased temporal demands have the potential to be associated with grievance filing only for those who feel they are under supervisory pressure to work overtime, we asked respondents to indicate along a five-point scale (1 = not at all pressured to 5 = very pressured) the extent to which they felt pressured by their direct supervisor to work overtime.

The mean coefficient of homogeneity (Raudenbush and Bryk 2002:111—see Appendix) was 0.56 for unit-level negative supervisory behavior, 0.69 for supervisory qualifications, 0.45 for supervisory pressure to work overtime, 0.85 for temporal job demands, and 0.90 for exposure to occupational hazards. Although the coefficients for the three supervisory scales (behavior, qualifications, and pressure) are considerably lower than those estimated for the task variables, a "rule of thumb" regarding the adequacy of different levels of homogeneity has yet to be specified, primarily because (a) different levels of homogeneity may be expected depending on the nature of the phenomenon measured (Snijders and Bosker 1999), and (b) estimates are sensitive to group size (Raudenbush and Bryk 2002). Given that supervisor-employee relations may vary among members of a common work group more than task characteristics, higher coefficients of homogeneity among the latter are not at all unexpected. Moreover, reliability estimates, by definition, are higher for larger groups than for smaller ones. Given that over 75% of the individuals in our sample were employed in larger work units (units with n > 7), for which the homogeneity estimates were considerably higher, for a large majority of respondents the mean coefficient of homogeneity for the two supervisory variables was well above 0.70.

Labor market variables. We coded the wage premium in percentage terms as the difference between the self-reported hourly wage and the gross hourly wage for comparable workers as a percentage of the latter. Comparable workers were defined as occupationally similar workers employed in the same standard metropolitan statistical area (SMSA) as defined and reported by the

U.S. Bureau of Labor Statistics Area Wage Survey for 1996 (the year of our data collection). Thus, as can be seen in Table 1, the workers in our sample received an average wage premium equivalent to 30% of the gross hourly wage of comparable workers. Following the approach adopted by Cappelli and Chauvin (1991), we used unemployment rate data specific to the county in which the individual reported being employed and based on 1996 State Department of Labor data. While the county unemployment rate could have offered only limited discriminatory power if a large proportion of the sample had been employed in the same county or in counties with a common unemployment rate, for the sample as a whole, county unemployment rates ranged from 3.5% to 10.6%, with no more than 18% of the sample employed in a single county or counties having a common unemployment rate. All individuals employed in the same facility or work site received the same value for unemployment rate.

Labor power. Labor power was assessed in terms of employees' perception of the employer's dependence on them. Drawing from Bacharach and Lawler (1981), this instrument contained three items, all starting with the phrase, "How essential are you to your employer's ability to ..." The three items ("get a quality job done," "get the job done on time," "prevent or solve problems") were measured using a five-point Likert scale (1 = not at all essential to 5 = very essential). The Cronbach alpha for this variable was 0.87.

Control variables. Following Cappelli and Chauvin (1991), we controlled for both skill level and seniority. Our model contains two variables related to skill level. The first, "unskilled," is a dummy variable coded as 1 for individuals employed in neither a craft nor a semi-skilled job (for example, machining). In this sense, this variable parallels the "assembly" variable used as a control variable by Cappelli and Chauvin. The second variable, "skilled," is a dummy variable coded as 1 for individuals employed in a craft job. To assess seniority, we asked

employees to report the number of years they had been working for their current employer. We also controlled for age, since, according to the discriminant analysis conducted by Allen and Keaveny (1985), this was one of the most powerful factors in discriminating between grievants and nongrievants. In addition, although gender does not appear to be in any way related to grievance filing (Allen and Keaveny 1985), we included it as a control variable in our model since it may, as noted above, underlie some of the potential impact of labor market factors (such as unemployment rate) on employee grievance filing.

Finally, because of the unique nature of the construction industry, we also included a dummy variable to account for employment in construction. Specifically, since construction jobs are site-based and have a specific duration, if a union worker is dismissed from a particular job, he always has the ability to go back to the union hiring hall to receive a new assignment. Given the site-specific nature of construction jobs, the cost of job loss may be somewhat lower for construction workers than for other workers, which could explain the significantly lower rates of employee grievance filing in this industry. By including a control for construction industry employment, we were able to take such industry-specific differences into account in our estimation of the impact of work context and labor market factors on grievance filing.

Analytic Approach

All hypotheses were tested on the basis of a hierarchical regression analysis, with employee grievance filing serving as the dependent variable in all five models (the demographic model, the work context model, the labor market context the full model, and the labor market *power interaction model). Because of the dichotomous nature of the dependent variable and because all respondents were employed in one of 68 different work units whose workers were represented by one of six different unions, we applied a multi-level approach for a logistic regression model. Using this

approach, the association among responses is modeled in terms of their pair-wise odds ratios (Carey, Zeger, and Diggle 1993). On this basis, we were able to take into consideration the nested structure of individuals within work units in the six unions, and incorporate both individual independent variables (demographic and wage premium power variables) and unit-level independent variables (supervision and job factors; unemployment) while taking into account the correlation between subjects belonging to the same unit (that is, controlling for common unit effects) and the correlation between subjects belonging to different units but the same union (that is, controlling for common union effects).

Initially, we tested these five models with the inclusion of the random effects of both the work unit and the union. We included the random effects of the union because of the need to control for a number of possible union-based effects having the potential to bias our results. For example, by including the random effects of the union, we were able to take into account the possible systematic differences in the contractual breadth of the grievance procedure across unions. While, as noted above, all of the unions included in the current study had broadly defined grievance procedures, in theory contracts may vary with respect to what is and what is not a grievance, and if certain predictors simply have little grievance-related relevance for those unions with narrowly defined contracts, failure to take the union into account could result in biased results. The inclusion of the random effects of the union also allowed us to test for possible industry-based effects. Given that grievable issues may systematically vary by industry, failure to take the union into account could also potentially result in biased results. Nevertheless, the variability among unions was not statistically significant (at p > .10) in any of the models. Consequently, in the interests of model parsimony, we dropped this parameter from the final analyses, testing these same five models once again, but this time including only the random effects of the work unit. We present the results of this second set of analyses only.

While there is no reliable model fit statistic for such models, McCullagh and Nelder (1989) suggested the use of the ratio of the Pearson Goodness-of-Fit Statistic to its degrees of freedom, with values approximately equal to 1 viewed as a rough indicator of fit. For model comparison purposes, we formed contrasts that were tested simultaneously using the Wald Chi² statistic. This test was used to assess the relative contribution of supplementary variables within nested models.

Results

Means, standard deviations, reliabilities, and correlations among the dependent, independent, and control variables are presented in Table 1. The correlations among the variables do not suggest any multicollinearity problems, with only the following correlations exceeding .70: r = -.78 between the skilled and unskilled dummy variables, -.99 and .99 between the construction industry dummy variable and skilled dummy variables, respectively, and .85 between gender and the skilled dummy variable.

The hypotheses were tested on the basis of a hierarchical logistic model as described above. The results are displayed in Table 2. As can be seen in the first column of this table, employment in the construction sector is, as indicated above, strongly associated with a reduced likelihood of employee grievance filing. The results shown in the table's second column provide moderate support for our first hypothesis, which predicted a positive association between the likelihood of grievance filing and the aversiveness of supervisory or job attributes characterizing the unit's general work context. Two of the five work context variables were significant predictors of grievance filing in the direction specified by the hypothesis. The odds of employee grievance filing were significantly associated with unit-level temporal load (estimate = 0.08; p < .001): as predicted, the odds of grievance filing increased as unit-level

Table 2. Factors Influencing Employee Grievance Filing: GENMOD Analyses.

	(1) Demographic		(2) Work Context		(3) Labor Market Contex		xt (4) Full Model		(5) Labor I Power Inter	
Model, Variable	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.
Demographic										
Age	-0.06*	.03	-0.05	.04	-0.06*	.03	-0.07	.04	-0.06	.04
Gender	-0.16	.11	-0.19	.15	-0.11	.12	-0.15	.15	-0.12	.16
Seniority	0.03	.06	0.06	.06	0.02	.06	0.04	.06	0.03	.06
Unskilled	-0.26	.16	0.04	.26	-0.09	.21	0.18	.29	0.17	.29
Skilled Construction	0.25	.22	0.19	.24	0.05	.23	-0.06	.31	-0.06	.31
Industry	-2.29***	.35	-1.94***	.37	-1.93***	.28	-1.61**	.59	-1.63**	.59
Work Unit ^b	0.26*	.11	0.08	.06	0.27*	.12	0.09	.06	0.08	.06
Work Context Neg. Spv. Behavior			0.12	.51			0.19	.50	0.18	.50
Spv.										
Qualifications			-0.87*	.39			-0.92*	.40	-0.94*	.40
Hours/Week Pressure to			0.08***	.02			0.09***	.03	0.09***	
Work Overtime			0.47	.31			0.41	.32	0.41	.32
Exp. to Hazards			0.21	.32			0.21	.31	0.21	.31
Labor Mkt. Context					0.04	0.0	0.00	05	0.05	05
Unemp. Rate					-0.04	.02	-0.02	.05	0.05	.05
Wage Premium					0.27	.24	-0.45	.23	0.35	.22
Interaction Power Unemp. Rate									09	.06
* Power Wage Prem.									0.00	.05
* Power									0.20#	.11
N	1,383		1,383		1,383		1,383		1,383	
Pearson GFI	1.02		1.07		1.02		1.08		1.08	
Contrast: Wald Chi² (df)			-50.93 (5) **	**	2.19 (2) N.S	. (54.98 (7) ***; 3.5 NS; 50.14 (5)		4.58 (3) N	s
Basis of Contrast(s)	_		Model 1		Model 1		Model 1; Mode Model 3	el 2;	Model 4	

^aInteraction terms centered on the basis of their grand mean.

work hours increased. Furthermore, as predicted, grievance filing was associated with the mean level of perceived supervisor qualifications in respondents' work units (estimate = -0.87; p < .05): the higher the supervisors' perceived qualifications, the lower the odds of employee grievance filing. Moreover, the test comparing this model and the simple demographic model displayed in column (1) was statistically significant (Chi²₅ = 50.93; p < .001), thus suggesting that this model significantly contributes to the explanation of the variance in grievance filing

above that explained by the simple control model.

In contrast, however, we found little support for the efficiency model of employee grievance filing as proposed by Cappelli and Chauvin (see column 3 of Table 2). Specifically, we found that higher rates of unemployment were not significantly associated with grievance filing. Similarly, the wage premium had no statistically significant relationship with grievance filing. Moreover, unlike the workplace model, the market-based model as a whole (Hypotheses 2a–2d) failed to contribute to overall

^bEstimate of the random variance between work units.

^{*}Statistically significant at the .10 level; *at the .05 level; **at the .01 level; ***at the .001 level (two-tailed test).

model fit above and beyond the basic demographic model (Chi², = 2.19; N.S.).

Indeed, the contrast results presented at the bottom of column (4) of Table 2 indicate that while workplace determinants significantly contribute to model fit above and beyond the contribution of demographic and labor market factors (Model 3; $\text{Chi}_{5}^{2} = 50.14$; p < .001), the same cannot be said regarding the contribution of labor market factors when added to the work context model (Model 2 in column 2 of Table 2): the contrast results for the labor market factors (the contribution above and beyond that of the demographic and workplace context factors) were not statistically significant ($\text{Chi}_{2}^{2} = 3.29$; N.S.).

Hypotheses 3a and 3b concerned the moderating effect of labor power on the relations between labor market factors and employee grievance filing. To test these hypotheses, we first centered all of the interaction variables (labor power, unemployment rate, and wage premium) on the basis of their respective grand means. We then expanded the Full Model (Model 4) by adding a parameter to assess the main effect of power as well as two power-based interaction terms (power multiplied by each of the two labor market variables). The results of this analysis (see column 5 of Table 2) provide support for Hypothesis 3a (job value), but not for Hypothesis 3b (alternatives). Specifically, while neither the main effect of power nor the interaction of unemployment (the proxy for alternatives) and power was statistically significant, the power-wage premium (that is, job value) interaction was marginally significant, consistent with Hypothesis 3a (estimate = 0.20; p = .08).

To get a better understanding of the nature of this interaction, we dichotomized labor power at its midpoint (3) into low-and high-power categories and re-ran the model.⁵ Consistent with Hypothesis 3a, there was a significant negative relation-

ship between wage premium and grievance filing (estimate = -0.83, p < .05) for those with low power, indicating that a higher wage premium was indeed associated with lower odds of employee grievance filing among those perceiving less employer dependence (those, in other words, with low employee power) relative to those perceiving greater employer dependence (those with high employee power). Although the Wald χ^2 statistic for the model using a centered, continuous measure of labor power was not statistically significant, the Wald χ^2 statistic for the same model using a categorical measure of labor power was (χ^2 = 4.48, p < .05), suggesting that the wage premium-power interaction component of this model may indeed make an important contribution in explaining the variance in grievance filing above and beyond that of the main effect only model (displayed in column 4 of Table 2).

Alternative Explanations and Specifications

We ran a number of post-hoc analyses to assess the degree to which our results may have been influenced by the composition of our sample or may be enhanced by means of alternative model specifications.

We first assessed whether the lack of a statistically significant direct effect for the labor market factors might have been due to the inclusion of construction workers in our sample. Indeed, employee grievance filing may be less sensitive to labor market

between the two resulting moderation-based slopes, it should be noted that relationships may be influenced by a categorized moderating variable to a greater or lesser extent, depending on the categorical boundaries selected. Nevertheless, such a clarification of the differences in moderation-based slopes is particularly useful in this case because the use of a continuous measure of labor power assumes that the response expressed as a logit is a linear function of the product (which, in this case, may be an overly restrictive condition). Our results indicate that while labor power has an appreciable impact on the wage premium-grievance relationship, this effect may not be monotonic.

⁵Such an approach has both advantages and disadvantages. While it allows us to clarify the difference

contingencies in construction than in the other industries, given the structural conditions accounting for the relatively low base rates of employee grievance filing in the construction industry (temporary, sitebased employment). In order to test for the possibility of a construction industry differential, we re-ran Models 3–5 using the manufacturing and service subsamples only. Interestingly, with the removal of the construction workers, the wage premium did emerge as a statistically significant predictor of grievance filing, and the labor market context model (Model 3) offered a significant contribution to model fit above and beyond the demographic model (Chi²) = 13.67, p < .01). However, contrary to the predictions of efficiency wage theory, we found that the wage premium had a negative association with employee grievance filing. Furthermore, when we included work context factors in the model (Model 4), the labor market variables became statistically insignificant, as did their relative contribution to model fit (above and beyond the contribution of demographic and work context factors). Finally, the findings on the moderating effects of power (Model 5) for the subsample excluding construction workers, while parallel to the results reported above for the larger sample (the sample including the construction workers), were now more robust. Specifically, using the continuous labor power variable in the interaction, we found that the wage premium * power interaction (estimate = 0.23) was significant at p < 0.05. In sum, while the somewhat limited direct and moderated effects of labor market factors may, to some extent, be explained by the inclusion of construction workers in our sample, the exclusion of these workers from the sample failed to generate results consistent with the predictions of efficiency wage

Next, we investigated the possibility that labor power also moderates the link between work-based grievance opportunities and employee grievance filing. Indeed, Klaas's model suggests that the relationship between grievance opportunity variables and grievance filing should be en-

hanced to the extent that the perceived potential benefits of grieving exceed the perceived potential costs (such as supervisory backlash or eventual dismissal). Consequently, in theory, power should influence the perceived benefit/cost ratio of seizing specific grievance opportunities, and, as such, moderate opportunity-grievance filing relationships. To test this alternative specification, we replaced the interaction terms shown in column (5) of Table 2 with five alternative interaction terms (labor power * each of the five work context variables). Each of the variables included in the interactions was centered before we estimated the model. None of these interaction terms were statistically significant. Moreover, the contribution of these additional interaction terms as a group to overall model fit above and beyond that of the basic work context model was not statistically significant. Consequently, contrary to Klaas's expectancy model, the link between work contextbased grievance opportunities and grievance filing does *not* appear to have been conditional on power-dependence contingencies.

However, on the basis of Klaas's model, another possibility to consider is that the relationship between work context-based grievance opportunities and employee grievance filing is moderated not by power, but by labor market contingencies. Consequently, we tested a final model in which, in addition to the variables included in the full model, we centered and then included five unemployment and five wage premium interaction terms—one for each of the workplace characteristics variables. Contrast analysis indicated that the addition of the interaction terms significantly contributed to overall model fit (Wald Chi²₁₀ = 21.67, p < .05), with the most significant interaction being between negative supervisory behavior and unemployment (estimate = -0.049; Wald Chi², = 3.09; p < .10).

The results of these post-hoc analyses partially support Klaas's expectancy model, suggesting that in addition to any direct (albeit, moderated) effects on employee grievance filing played by labor market fac-

tors, such factors may also have important indirect effects.

Discussion

The findings presented above provide partial support for a core element of Klaas's expectancy model of grievance behavior: the argument that in seeking to explain employee grievance filing, it is beneficial to take into account not only factors associated with grievance opportunities, but also factors that may influence the utility of seizing perceived opportunities. However, our results also indicate that such instrumentality effects may largely depend on labor power.

We found that when controlling for basic demographic factors, several core characteristics of the work context made a statistically significant contribution to explaining the variance in employee grievance filing. In contrast, we failed to find a parallel effect for labor market factors. Moreover, we also found that while workplace context determinants contributed significantly to model fit above and beyond the contribution of control and labor market variables, the addition of labor market variables to a model containing demographic and work context variables (see the Full Model in column 4 of Table 2) did not significantly contribute to model fit, since the labor market variables had no statistically significant effect on the odds of grievance filing. Taken in combination with the finding that the labor market factor model (Model 3) itself failed to contribute to model fit over and above the basic demographic model, these findings suggest that work context factors play a more powerful role than labor market factors in explaining employee grievance filing.

Importantly, however, we also discovered a possible explanation for the limited direct effect of labor market factors, at least with respect to the wage premium. Specifically, when we examined the interaction of market factors with labor power, we found that the lack of a statistically significant direct effect may stem from the fact that labor power moderates the effect of market

factors. That is, while higher wage premiums may make grievance filing more likely among employees who perceive that their employer is highly dependent on them (those, in other words, who have a higher level of labor power), these effects may be diminished (if not reversed) for those with less labor power. Absent the consideration of such an interaction (as was the case in the Full Model in column 4 of Table 2), these opposing tendencies may neutralize one another, resulting in a statistically insignificant direct effect when the more powerful work context factors are also included in the same model.

The finding that the influence of the wage premium on employee grievance filing is somewhat contingent on perceived employer dependence is consistent with power-dependence theory. Specifically, the findings suggest that as employees perceive their employers to be more dependent on them and become less fearful about the possible backlash of filing a grievance, the relative utility of grievance filing may rise. Our finding is not inconsistent with the efficiency model of grievance activity. Instead, it simply imposes a boundary condition on this model, suggesting that the model may only hold true among those workers with a relatively high degree of labor power. We believe that Cappelli and Chauvin's positive results for the wage premium variable were a function of the fact that they tested their model on data from multiple bargaining units of a single, large auto manufacturer. Given the high level of union density in the American auto industry, as well as the fact that employees of this particular manufacturer are represented by one of the more powerful unions in the United States, it is likely that employees believed they incurred relatively little personal risk in filing grievances. Consistent with our theory, under such conditions of high labor power, a positive association between wage premium and grievance activity is to be expected. However, our results suggest that these same findings cannot be universally expected, particularly when labor power is more variable (that is, when the analysis is conducted on a broader

sample of employees represented by a wider range of unions and employed in a wider range of work contexts).

In sum, the results discussed above suggest that power-dependence contingencies moderate the effect of market-based instrumentality variables on employee grievance filing. That is, the impact on grievance filing of labor market instrumentality factors in general, and the wage premium in particular, appears to be conditional on the degree of perceived labor power.

Limitations

Several limitations of our study create opportunities for future research. The first has to do with the generalizability of employee grievance behavior models across various types of grievances. For example, it may be that certain types of grievances (for example, those related to employee discipline or discharge) are filed almost automatically and without regard to the perceived potential benefits and costs. Indeed, the work of Bemmels (1994) suggests that filing patterns may vary significantly depending on grievance type. In the current study, we did not distinguish among different types of grievances; consequently, our results may overstate the direct and indirect impact of labor market factors on discipline-based grievances. Still, according to Lewin and Peterson (1988:141), only 10% of all grievances are directly related to disciplinary action. Nevertheless, it is likely that predictive power can be enhanced if future models take into account the different types of grievances.

Second, in focusing on how market-based instrumentalities may moderate the effects of work and supervisory characteristics on employee grievance filing, the current study may have neglected other, more salient moderators. For example, the perceived efficiency of the grievance system relative to other, potentially less formal systems of conflict resolution may have a greater impact on the relationship between work/supervisory characteristics and grievance filing than market-based instrumentalities do. Alternatively, the link between work

conditions and grievance filing may depend more on perceptions of system fairness (procedural justice) than on the market-based factors analyzed in this study. In the future, researchers may want to examine the direct and moderating effects of these variables on employee grievance filing. They may also want to investigate the possibility that such system characteristics mediate the effects of the labor market conditions on employee grievance filing.

Finally, our research raises questions about the generalizability of models of grievance behavior across unions, and particularly unions operating in different sectors. While the random effects of union membership were not statistically significant in the current study, our sample was limited to members of only six unions. It is possible that with a wider variety of unions included, the variance in union power would be more accurately reflected, as would be the variance in labor-management relations. A wider variety of unions would also allow the consideration of informal dispute resolution processes, which are likely to vary across unions. Such processes may play a key role in explaining the variance in the number of employee complaints that require formal and written employee grievance filing.

Conclusion

Despite these limitations, and consistent with Klaas's theory, the findings presented above suggest that predictive utility may be enhanced by grievance models that incorporate not only workplace characteristics potentially associated with the perception of grievance opportunities, but also market-based instrumentality variables potentially explaining when employees may be more likely to seize perceived opportunities. However, our findings also suggest that the impact on employee grievance filing of labor market factors such as unemployment and the wage premium may be more complex than current theory suggests. Specifically, while other studies have shown that such labor market factors may play a powerful, direct role in explaining grievance filing (Cappelli and Chauvin

1991), our results indicate that relative to workplace characteristics, these labor market factors, as *direct* predictors of employee grievance filing, offer limited predictive utility. We found that the direct contribution of labor market factors was statistically insignificant, particularly when these variables were incorporated into a workplace characteristics model of grievance filing.

In contrast, our results indicate that the direct effects of market-based instrumentality factors on grievance filing are likely to be influenced by power-dependence contingencies, and that market-based instrumentality variables may themselves moderate the effects of work context factors on grievance filing. In terms of power-dependence contingencies, our results suggest that the direct effects of at least one labor market variable—the wage premium—on grievance filing may depend on perceived employer dependence, or what we refer to as labor power. Specifically, our findings suggest that under conditions of high labor power, consistent with the predictions of efficiency wage theory, the likelihood of employee grievance filing rises. However, under conditions of low labor power, the positive relationship between the wage premium and grievance filing weakens and even appears to reverse itself. In terms of the moderating effect of market-based instrumentalities, consistent with Klaas's theory, the results of our post-hoc analyses indicate that the association between aversive work/supervisory conditions and grievance filing is likely to be stronger under those labor market conditions (in particular, high unemployment) that enhance the relative benefits of voicing over other problem-coping alternatives such as exit or shirking.

In sum, our results leave us far less convinced than efficiency wage theorists about the direct role of the labor market in explaining employee grievance filing. While labor market factors may indeed influence employee grievance activity, our findings lead us to conclude that their effect is likely to be more complex than that suggested by current theory.

The incorporation of power-dependence notions into such models may enhance the overall predictive utility of the efficiency model of grievance activity and may explain why wage premiums have more robust direct effects in one context than in another. Moreover, specifying these same market-based variables as moderators of the links between workplace conditions and employee grievance filing (as opposed to specifying them as direct determinants of grievance filing) may enhance the overall explanatory potential of grievance process models.

Implications

For Employee Relations researchers and practitioners, the findings presented above have a number of important implications. Our results strongly suggest that labor market contingencies have only a limited indirect effect on employee grievance filing, and that workplace factors play a far more substantial role in explaining such behaviors. Thus, it appears that many of the antecedents of employee grievance filing are not beyond the influence of labor and management.

Nevertheless, for *managers* in firms considering the adoption of a grievance procedure as a means to resolve conflicts more efficiently, lower turnover, and reduce shirking, our results suggest that such a system may be more likely to generate grievances when adopted in the framework of a high commitment work system (Baron and Kreps 1999)—that is, when workers are already highly empowered and are receiving a substantial wage premium. Under conditions of low labor power, however, the threat of supervisory retaliation, when combined with unfavorable labor market conditions, reduces the likelihood that employees will actually use the grievance procedure.

For researchers, one of the primary implications of this study may be that the relative utilization and efficacy of grievance systems are likely to vary across firms depending on a wide variety of factors likely to influence labor power, including the nature of the firm's human resource strat-

egy (Bamberger and Meshulam 2000) and its union status. Given the growing popularity of alternative dispute resolution systems in non-union firms (Feuille and Hildebrand 1995), the investigation of this proposition would appear to be one attractive avenue for future research in this area.

An additional research implication of our study is the apparent need to reorient the analytical paradigm that has been used to frame much of the research on employee grievance behavior to date. Specifically, our findings suggest that in order to model employee grievance behaviors more accurately, it is necessary to take into account not only instrumentality factors such as the labor market, but also grievance filing in the broader context of power-dependence relations between employees and their employers. Clearly, in doing so,

researchers will be forced to go beyond the simple cause-and-effect models examined to date and to generate more complex models of employee grievance behavior incorporating a variety of moderating and mediating effects.

Finally, our results suggest that *union leaders* need to address the possibility that lower-power members or members of lower-power bargaining units may be increasingly hesitant to file grievances as labor market conditions worsen. Although the grievance system may lie at the heart of the trade union movement and is often highlighted in union organizing campaigns, our results suggest that, under worsening market conditions, it may offer only limited utility to those perhaps most in need of such a means of workplace redress.

Appendix Coefficient of Homogeneity – Reliability (Raudenbush and Bryk 2002)

 $i = 1, ..., n_{jk}$ the index of the individual level (level 1), where n_{jk} is the number of participants in the jth unit.

 $j = 1, ..., J_k$ the index of the unit level (level 2), where J_k is the number of units.

 \overline{Y}_i = the mean value for all individuals in the jth unit.

 $\overline{\lambda}$ is the average reliability of \overline{Y}_i as estimates of μ_{γ_i} based on the average level-1 sample size \overline{n} .

$$\begin{array}{ll} \gamma_{j}=&\frac{\tau^{2}}{\tau^{2}+\sigma^{2}\,/\,n_{j}}&=&\frac{n_{j}\rho_{I}}{1+(n_{j}-1)\rho_{I}}\ \ ,\, where}\,\,\rho_{I}=\,\frac{\tau^{2}}{\tau^{2}+\sigma^{2}}\\ \\ &Average\ reliability:}\,\,\overline{\lambda}\,=&\frac{\tau^{2}}{\tau^{2}+\sigma^{2}\,/\,\,\overline{n}} \end{array}$$

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