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ABSENTEEISM AND THE COLLECTIVE BARGAINING AGREEMENT: AN EMPIRICAL TEST

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Absenteeism has been described as a behavior that has "potentially critical consequences both for the person and the organization" (Porter & Steers, 1973, p. 151). As such, employee absenteeism has been a concern of practitioners and the focus of extensive research by organizational theorists. In a national survey, 79 percent of responding organizations reported that absenteeism was their most serious disciplinary problem (Bureau of National Affairs, 1973). One estimate indicated that 400 million work days are lost each year in the United States as a result of employee absenteeism (Yolles, Carone, & Krinsky, 1975). Recent reviews (Muchinsky, 1977; Porter & Steers, 1973; Steers & Rhodes, 1978) have underscored the impacts of absenteeism on the organization. Steers and Rhodes (1978), for example, suggested that, based on estimates of costs incurred in direct salaries, fringe benefits, temporary replacement, and administrative costs, absenteeism in United States' organizations may cost from $8.5 billion to over $20 billion per year.

Naturally, given the demonstrated seriousness of absenteeism, substantial research effort has been dedicated to identifying its associated variables. For instance, recent studies have examined absenteeism in a variety of contexts: employee age and tenure (Nicholson & Goodge, 1976; Nicholson, Brown, & Chadwick-Jones, 1977; Garrison & Muchinsky, 1977), organization size (Ingham, 1970), job satisfaction (Ilgen & Hollenback, 1977; Nicholson, Wall, & Lischeron, 1977), turnover (absenteeism as a predictor variable) (Waters & Roach, 1979), personality variables (Bernardin, 1977; Garrison & Muchinsky, 1977).

With the exception of Ingham's (1970) inquiry, these recent studies have focused on individual rather than organizational predictors of absenteeism. Bartol (1979) suggested and empirically supported the notion that this may be an important distinction with respect to employee turnover among professionals. It may be a viable distinction with respect to

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employee absenteeism as well. In addition, recent research, although focusing on antecedents of absenteeism, does not address the issue of the consequences of this behavior. Morgan and Herman (1976) posit that such consequences are a critical predictor of absenteeism.

The present research, then, seeks to examine organizational policy correlates that may affect the consequences of employee absenteeism. Noting the lack of empirical research in the general area of labor-management relations (Ash, 1970; Korman, Greenhaus, & Badin, 1977), such predictors may be found in the collective bargaining agreements between the organization and its employees. Investigations have not examined the relationship, if any, between relevant provisions of these collective bargaining agreements and absence rates of organizations. This may be a critical exclusion as certain absenteeism policy provisions that are legitimated by the language of the collective bargaining agreement may have the effect of making absenteeism "easier" or more profitable for the employee, thereby leading to higher absence rates for the organization. Such provisions may lead to distinctly different consequences relative to employee absenteeism. Several such provisions that may be associated with organizational absence rates have been chosen for examination in this study. It should be noted that this investigation will rely on provisions of various collective bargaining agreements. Formal agreement between management and organized labor, however, is not a requirement. Any organizational absenteeism policy may be expected to affect the consequences of this behavior. Any organization, public or private, with or without formal contractual relations with organized labor may have absenteeism policy provisions that may affect employee absenteeism. Given the possible impact of absenteeism policy on employee behavior, the following hypotheses are developed.

Hypotheses

The amount of money earned by employees of the organization may affect the organizational absence rate. As income increases, employees may "buy" leisure time by being absent: a substitution effect. Simply, they may be able to afford to be absent. Alternatively, it could be argued that as employee income increases, absenteeism is less likely to occur (income effect). In this case, absenteeism is relatively expensive because of income forgone. Within the sample organizations, however, the substitution effect may be more likely because employees do not sacrifice their entire income when absent. Rather, they receive from 75 percent to 100 percent of their ordinary wage, depending on their particular collective bargaining contract provisions. A positive association, therefore, is hypothesized between peak wages as defined by the agreement and the absence rates of the sample organizations. Peak wage was chosen rather than mean wage because just over 80 percent of the operational employees of the sample organizations receive (have sufficient seniority to receive) the maximum
wage. This is not a function of an unusual level of seniority in the industry but of rather truncated wage progression schedules. The time required to progress from base rate to peak wage averages less than 18 months for these transit properties. The choice, however, between peak and mean wages is of little statistical consequence as these metrics are very highly correlated (.94, \( p < .001 \)).

There also may be a systematic relationship between absence rates and the requirements to establish proof of illness (doctor's certification). The collective bargaining contracts differ on this policy: certification is required by some of the sample organizations and not by others. It is expected that organizations that do not require certification will have higher rates of absenteeism.

The rate at which paid sick leave accumulates may be an important determinant of absence rates. For instance, an organization may allow \( \frac{1}{2} \) day per month to accumulate. At this rate, employees would earn six paid days of sick leave per year. Another organization may allow the accumulation of \( 1 \frac{1}{2} \) days per month, which amounts to 18 paid days per year. It is suspected that organizations that provide more sick days per year may have higher absenteeism rates.

The policy covering the disposition of unused sick leave benefits may also influence absenteeism rates. Suppose, for example, that an organization has no provision for unused sick leave. In other words, if employees leave the organization with 45 earned days of sick benefits "on the books," they would receive no compensation for these unused days. Other organizations pay (usually some percentage rate rather than at par) departing employees for their accumulated, but unused, benefits. It is expected that organizations that do not reimburse unexpended benefits will have higher rates of absenteeism.

**Method**

Data were collected through site visits to 29 west coast organizations that provide essentially identical transportation services (urban mass transit). Data on the following variables were collected.

Absenteeism was measured by calculating the ratio of the total number of absent hours to total hours worked by all operations employees (bus drivers). Although it is recognized that some portion of absent time is essentially unavoidable, it is hypothesized that total absence time, irrespective of its nature, will be systematically related to absenteeism policy contractual provisions. In the subject organizations this index of absenteeism ranged from a low of 2 percent (indicating that the average employee was absent 2 percent of the time) to a high of 15 percent (indicating that the average operations employee missed 15 percent).

Peak wage rate was determined by inspection of the labor contract in effect during this research. The range was $4.40 to $7.66 per hour.
Proof of illness is also a contractual provision. Such certification was either required by the contract or it was not.

Sick benefits accumulation rate, again, is determined by the contract. The range for this variable is from \( \frac{1}{2} \) day per month to more than \( 1\frac{1}{2} \) days per month.

Unused sick leave policy is determined from the contract as well and is binary for purposes of this analysis. Employees either receive some compensation for unexpended sick leave or they do not.

Results

Table 1 illustrates the associations between the absence rate of the subject organizations and the collective bargaining contract provisions enumerated by this study that may affect the consequences of absenteeism for employees. Because of a relatively small sample size (\( n = 29 \)) and the resultant possibility of some skewness in the data, Spearman's rho is given in Table 1 along with Pearson's product moment correlation for purposes of comparison.

<table>
<thead>
<tr>
<th>Zero-Order</th>
<th>Absence Rate and:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Peak Wage</td>
</tr>
<tr>
<td></td>
<td>( .49^{\text{na}} ) (( .41^{\text{ab}} ))</td>
</tr>
<tr>
<td>Controlling for:</td>
<td></td>
</tr>
<tr>
<td>Organization size</td>
<td>.73^{***}</td>
</tr>
<tr>
<td>Peak wage</td>
<td></td>
</tr>
<tr>
<td>Proof of illness</td>
<td>.50*</td>
</tr>
<tr>
<td>Sick benefits accumulation rate</td>
<td>.29</td>
</tr>
<tr>
<td>Unused sick leave policy</td>
<td>.39*</td>
</tr>
</tbody>
</table>

|                          | \( ^{a} \text{Pearson product moment correlations.} \) |
|                          | \( ^{b} \text{Spearman's rho.} \) |
| .73^{***}                | \( ^{b}p<.05 \) |
| -.18                    | \( ^{b}p<.01 \) |
| .67^{**}                | \( ^{***}p<.001 \) |

With the exception of the proof of illness relationship, the hypothesized associations are empirically supported. It seems that organizations that pay operators a higher rate, allow sick benefits to accumulate at a faster rate, and do not remunerate earned, but unused sick leave have higher absence rates.

There are two potential issues that should be addressed in order to interpret these results responsibly: (1) effects of additional organizational level variables on the observed associations and (2) the relationships, if any, among the independent variables. Child (1977), for example, indicated
that there are three main factors having major effects on organizational level associations: technology, environment, and organizational size. The possibility of technological and environmental factors having affected the reported associations is minimized in the subject organizations. As previously noted, these organizations provide essentially identical services (fixed-route bus transit) with essentially identical technologies. Their equipment and technologies at the operational level are undifferentiated. The organizational environments in which these services are provided have nearly identical characteristics. Although these organizations are subject to external constraints principally as a function of substantial subsidizing by state and federal agencies, they (the subject organizations) are uniformly affected.

The sizes of these organizations, however, vary considerably, from a few dozen vehicles to more than 2,000. Perhaps the associations are not explained by systematic relationships between contractual provisions and absence rates, but rather by relationships between absenteeism and organizational size and the prevalence of certain absenteeism policy provisions in contracts for larger (or smaller) organizations. The size of the organization, then, may be a matter of some concern.

An additional concern may be the issue of interrelationships among the independent variables. Table 2 illustrates those relationships along with those with organizational size.

TABLE 2
Interrelationships between Absence Rate, Organizational Size and the Independent Variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence rate</td>
<td>-.23</td>
<td>.49*</td>
<td>-.13</td>
<td>.69**</td>
<td>.44*</td>
<td></td>
</tr>
<tr>
<td>Organizational size*</td>
<td>.49*</td>
<td>-.08</td>
<td>-.18</td>
<td>.03</td>
<td>.01</td>
<td>.34*</td>
</tr>
<tr>
<td>Peak wage</td>
<td>.10</td>
<td>.36</td>
<td>.15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proof of illness</td>
<td>.00</td>
<td>.01</td>
<td>.34*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sick benefits accumulation rate</td>
<td>.00</td>
<td>.01</td>
<td>.34*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unused sick leave policy (no remuneration for</td>
<td>.00</td>
<td>.01</td>
<td>.34*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>earned, but unused sick leave)</td>
<td></td>
<td></td>
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</tbody>
</table>

*Number of revenue vehicles, an industry standard for describing the size of a transit property.
*p<.05
**p<.01

As indicated in Table 2, there are relationships between organizational size and among the independent variables. These associations are not large, but they are matters of potential concern. Table 1 illustrates the effects of controlling for the effect of organizational size and the statistically significant interrelationships among the independent variables.

As evident from the correlations in Table 1, the zero-order correlations between the study's "independent" variables and the absence rate criterion generally are not greatly reduced by the partialling procedure. In three instances, however, the partialling procedure results in marked decreases in the observed relationships (e.g., the correlation between peak
wage and absence rate controlling for sick benefits accumulation rate). These results suggest that the several independent variables do not operate independently of one another in accounting for variance in the absence rate criterion.

Discussion

The results of this study are supportive of the general hypothesis. That is, certain collective bargaining contract policies may be moderately strong correlates of organizational absence rates. It has been suggested that certain of these provisions may have the effect of making absenteeism easier or more profitable for the employees. This tendency may lead to higher absence rates for the organization. Arguably, provisions such as relatively generous accumulations of sick leave are not stringent absenteeism control measures.

In an earlier study, Morgan and Herman (1976) reported that past absenteeism was a very good predictor of future absenteeism ($r = .70$). Individuals who have been absent evidently are not hesitant to be so again. Morgan and Herman's research led to an interesting conclusion:

| The results indicate that for some employees absenteeism provides an opportunity to experience consequences that tend to encourage absenteeism and that are not offset by organizationally controlled consequences that would tend to deter absenteeism (1976, p. 738). |

The present study may be supportive of their major conclusion. There seems to be evidence that organizational absence rates are related to organizational control policies and practices related to absenteeism, at least as enumerated by the collective bargaining agreement.

Many organizations are relatively generous with their absence provisions. For example, some organizations in this sample provided for the accumulation of 18 (1½ days per month) days per year of sick leave. Under these circumstances, it is difficult to argue that employees do not experience consequences that tend to encourage absenteeism. Again, it should be emphasized that some employee absenteeism is largely unavoidable. Still, it is fascinating to note the strength of associations between organizational absence rates and the selected contract provisions.

This study is exploratory in nature. To the authors' knowledge, it is the first examination of organizational absence rates in relation to collective bargaining provisions that set parameters on absence behavior. Several caveats may be in order. The homogeneity of the sample actually presents something of a paradox. Positively, technological and environmental factors that may affect organizational level inquiry may have relatively little impact in this case because these factors are largely undifferentiated among the subject organizations. However, the homogeneity of the sample and the relatively small sample size ($n = 29$), may limit the generalizability of the results. Also, although the organizational environments may be similar, the individual environments from which the absence rates are aggregated are not subject to control in this study. For example, regional
leisure patterns, unemployment, and so forth may affect the absence behavior of employees differentially depending on the particular area of employment. This may have minimal effect because in this case all subject organizations are located in the same state. Nonetheless, there may be regional differences. This remains an empirical question.

Even so, given the ordinarily low associations between attitude-attendance relationships (Locke, 1976; Steers & Rhodes, 1978) and the caution that further replication of the attitudinal-withdrawal relationships may not be particularly fruitful (Mobley, Horner, & Hollingsworth, 1978), it appears that investigations into such areas as consequences of absenteeism may be in order. The present authors agree with Porter and Steers (1973) that understanding of the manner in which actual withdrawal decisions are made is far from complete. An examination of control policy, contract language, and various other practices that may affect the consequences of absentee behavior may be a responsible direction for future research.

REFERENCES